

MANUFACTURERS' RECORD

A WEEKLY REVIEW OF THE IRON, STEEL, METAL & HARDWARE TRADES.

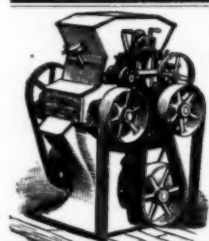
AND A MANUFACTURING AND TEXTILE PAPER, DEVOTED TO THE UPBUILDING OF SOUTHERN MANUFACTURES AND THE DEVELOPMENT OF THE MATERIAL RESOURCES OF THE SOUTH.

VOL. 8. No. 3.
WEEKLY.

BALTIMORE, AUGUST 29, 1885.

\$3.00 PER ANNUM.
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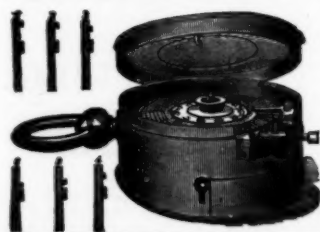
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The instrument will in all cases be Warranted Perfect and Satisfactory.

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SHULTZ BELTING COMPANY, ST. LOUIS, MO.

Manufacturers of Shultz Patent Fulled Leather Belting, Lace and Picker Leather.

OUR BELTING is made of Leather, tanned on the surfaces only; the interior (which is the fibre and strength of the hide) is not tanned, but rawhide fulled and softened by our patent process. Our belting is more pliable, and hugs the pulley better and transmits more power than any other Belt. It does not pull out at the laceholes or rivets. It stretches less than any other felt. It works equally well for the largest Driving Belts or for the fastest running machinery and smallest pulleys. OUR LACE LEATHER is made of rawhide, by our patent process, without any tanning and is stronger and will wear better than any other. WE ALSO MAKE THE BEST PICKER LEATHER AND BELT GREASE IN THE COUNTRY. Satisfaction guaranteed.

Southern Agents—FRED. N. OGDEN, New Orleans, La.

J. H. COFFIN & CO., Memphis, Tenn.

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STEVENS'

J. STEVENS & CO. "PREMIER" RIFLES, Nos. 7 and 8. CHICOPEE FALLS, MASS.



American Field, Jan. 10, 1888.—"The next gun was a 22 caliber Stevens, and a pair of beautiful pistols, made by Stevens, on the Lord pattern. These weapons Dr. Carver uses on the stage, and does all his fancy shooting with. I saw him during the morning shoot with these pistols, in two consecutive shots, two half dollars thrown in the air, and he sent them whizzing away with holes nearly through the center of both. Opening a window, and calling upon Hans (one of his

No. 7. 22 Cal. 32, 38 or 44 Cal.
24 inch, \$29.00.. \$29.00
26 inch, 31.00.. 30.00
28 inch, 33.00.. 31.00
30 inch, 35.00.. 32.00
No. 8 same style as 7, but fancy finish, \$2.00 extra.

Swiss Stock with Fore-end, Vernier and Open Back Sights and Globe Sight.

Vernier and Open Back Sight and Beach Front Sight.

attendants) to fix up a target, I saw him shoot twenty shots, fired at forty steps, and the bullets could all be covered with a ten cent piece." Mr. Reeves, in *American Field*, Dec. 6, 1884.—"Regarding the test of Mr. Ira A. Paine with a Stevens' Gallery Pistol, 22 caliber. He put several shots in a one inch bullseye in a card, held in a lady's hand at ten yards and then hit the card edgewise three shots out of four. Small cards measuring four and a half by three inches

No. 5. 22 Cal. 32, 38 or 44 Cal.
24 inch, \$25.00.. \$25.00
26 inch, 27.00.. 26.00
28 inch, 29.00.. 27.00
30 inch, 31.00.. 28.00
No. 6 same style as 5, but fancy finish, \$2.00 extra.

STEVENS' "EXPERT" RIFLES, Nos. 5 and 6.



No. 2, 22 Cal.; No. 1, 32, 38 and 44 Cal.

were then substituted with three spots in the center of the card like the three of hearts, when he put a shot through each heart. The next test was firing at a walnut and grape placed on the top of his wife's head, on a small pedestal about one inch high. He knocked the grape off the first shot, and then the walnut at the second shot, all at the same distance—ten yards."

No. 2. 22 Cal. 32, 38, or 44 Cal.
24 inch, \$20.00.. \$20.00
26 inch, 22.00.. 21.00
28 inch, 24.00.. 22.00
30 inch, 26.00.. 23.00
Fancy finish, \$2.00 extra.

Weight of Rifles 6½ to 8½ pounds.

Stevens' "Crack-Shot" Rifle costs \$6.00 more than Nos. 1 and 2. The "Crack-Shot" has "Lyman" Sight on stock in place of open rear sight on barrel. Otherwise like Nos. 1 and 2. All Rifles or Pets are chambered for rim fire cartridges, unless otherwise ordered. On request will chamber for any desired rim or central fire cartridge.

STEVENS' HUNTERS' PET RIFLE.

22 Rim, 32, 38 or 44 Caliber, Rim or Central Fire, with Combined Sights.
18 inch, \$18.00. 20 inch, \$19.00. 22 inch, \$20.00. 24 inch, \$21.00.

Weight of 18 inch about 5 1-4 lbs. and good for 40 rods.

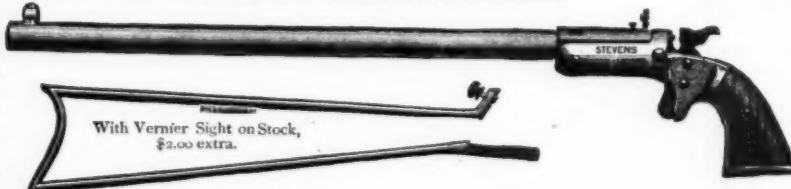
HUNTERS' PET SHOT GUNS.

Same style and price of the above, to use the Stevens' Reloading Central Fire Shell, 38 or 44 Cal. or the U.M.C. Co.'s Berdan Primer, 20 cal. Shell. NOTE—Central Fire Hunters' Pet Rifle Barrels and Shot Barrels fitted to same frame when so ordered. Price of 18 inch, extra, \$10.00. Price of 18 inch Shot Barrel, \$13.00. Mahogany Cases for Pet, 5.00

STEVENS' NEW MODEL POCKET RIFLES.

Weight of 10 inch about 3 pounds.

22 or 32 Cal., Rim Fire with Combined Sights.
10 inch, 12 inch, 15 inch, 18 inch.
\$12.25. \$13.25. \$15.00. \$16.50.
Extra Barrels only, full sighted.
10 inch, 12 inch, 15 inch, 18 inch.
\$6.50. \$7.50. \$8.50. \$10.00.



STEVENS' NEW MODEL POCKET SHOT GUNS.

For Taxidermists' use, same style and price of the New Model Pocket Rifle, to use the Stevens' Reloading Brass Shells, 38 and 44 Cal. Mahogany Cases for New Model Pocket Rifles, 10 inch, \$2.50; 12 inch, \$2.75; 15 inch, \$3.00; 18 inch, \$3.50.



STEVENS' OLD MODEL POCKET RIFLES.

22 Cal. with Globe and Peep Sights.
10 inch, Plated rest. \$11.00. Japanned rest. \$10.50.
6 inch, no rest, \$7.00.
8 inch, Plated rest. \$10.00. Japanned. \$9.50.

STEVENS' GALLERY PISTOLS.

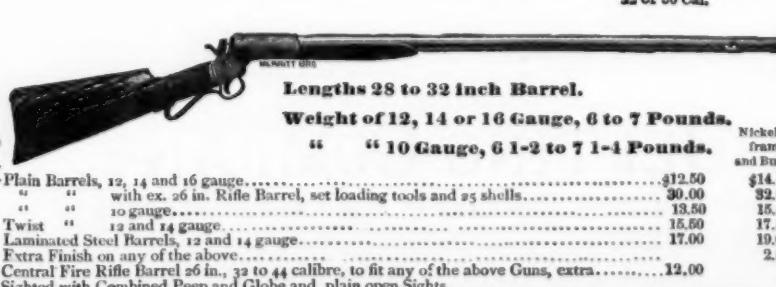
"Conlin" Model, 10 inch Barrel, 22 Cal., weight 2½ pounds, Price, \$20.00
"Lord" Model, 10 inch Barrel, 22 Cal., weight 3 pounds, " 22.00
"Diamond" Model, 10 inch Barrel, 22 Cal., weight 11 ounces, " 10.00



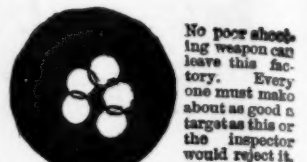
Single-Shot Pistol,
3½ inch Barrel, \$2.50.
22 or 30 Cal.

STEVENS' Single Barrel Breech Loading Shot Gun.

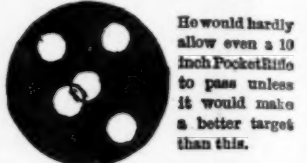
WITH FOREHAND STOCK AND STEVENS' PATENT BOLT.—10, 12, OR 16 GAUGE.



Lengths 28 to 32 inch Barrel.
Weight of 12, 14 or 16 Gauge, 6 to 7 Pounds.
" " 10 Gauge, 6 1-2 to 7 1-4 Pounds.
Plain Barrels, 12, 14 and 16 gauge, \$12.50
" " with ex. 26 in. Rifle Barrel, set loading tools and 25 shells, 30.00
" " 10 gauge, 13.50
Twist " 12 and 14 gauge, 15.50
Laminated Steel Barrels, 12 and 14 gauge, 17.00
Extra Finish on any of the above, 19.00
Central Fire Rifle Barrel 26 in., 32 to 44 calibre, to fit any of the above Guns, extra, 12.00
Sighted with Combined Peep and Globe and plain open Sights, 2.50



5 successive shots, 50 feet.



How would hardly allow even a 10 inch Pocket Rifle to pass unless it would make a better target than this.

5 successive shots, 50 feet.

WHY should every Lawyer, Doctor, Preacher, Teacher, or any one who needs pleasant recreation to draw the mind away from their daily cares, buy and constantly use some one of the various arms made by J. Stevens & Co.?

BECAUSE you can have more fun in a day with a Stevens' Rifle or Pocket Rifle than with a common weapon in a whole year.

BECAUSE when any one practices with weapons of such wonderful accuracy the interest does not diminish, but increases constantly. You can practice an hour or two a day, a hundred and fifty times in a year, without tiring. When your skill is such that you can make targets like the first, try it at a longer distance and you will be surprised at the pleasure that results from the accomplishment of the object.

BECAUSE all their arms are light and convenient, and easily taken apart to carry in a trunk or bag, or in a small package.

BECAUSE you can with a little practice become a really expert shot at a merely nominal expense.

BECAUSE when you buy one of these arms you are sure of an accurate shooter. Every arm before it can leave their factory must by actual trial make targets of which the best one above is a fair sample. No Fisherman's outfit is complete without a two-pound Pocket Rifle with which to knock over any game, large or small, he is likely to come across.

Mr. Jones, of Pittsburgh, lately made some remarkable shooting with Stevens' Rifle with 43 short cartridge at 200 yards. It is something new to see a Rifle with 22 short cartridge competing successfully on the 200 yard range with Rifles of the best makers shooting very much larger cartridges.

Mr. Butler, of Syracuse, N. Y., has four other Rifles of the best makes, but says he uses his little Stevens' a dozen times as much as all the rest. It is so convenient to carry and so wonderfully accurate.

Mr. R. B. Fuller, 173 South Clark St., Chicago, has a twenty dollar Stevens' Rifle that has been used in his shooting gallery every day for eight years, which is now in good order after having been shot over 500,000 times.

Mr. Carpenter, of Louisville, Ky., lately went to a turkey shoot and secured 7 turkeys in a couple of hours. He shot a 22 caliber 18 inch New Model Pocket Rifle weighing 2½ pounds at 225 yards.

Mr. Ingersoll, who has two of the finest shooting galleries in Pittsburgh (and probably in the world) has at present 'Thirty-one (31) Stevens' Rifles in use in his galleries.

R. P. Cory, of Concession, Canada West: I have used for three years a Stevens' 22-caliber Pocket Rifle, have shot about 15,000 times, can kill all sorts of small game with it a great deal farther than with the best Shot Gun. For squirrel shooting I will match this little Pocket Rifle against any man with the best Shot Gun that can be brought forward.

From *American Field*.—"For careful boring and grooving, and perfection of workmanship in every particular, I consider the Stevens' Rifle the superior of any in the market." COQUINA.

My Old Model Pocket Rifle after being used 8 or 9 years, is as fine as ever. A. R. C.

I have one of your J. Stevens & Co., 26 in. barrel, 38 calibre Rifle, and it is the finest shooting rifle I ever saw. I have also one of the Hunters' Pet, 32 calibre, the best short range rifle I ever owned. They are a perfect rifle in every respect. W. S. C.

I received the 10 inch Stevens' Rifle, and was very much pleased to find it the best shooting article that I have ever handled. The first shot I fired, I knocked one of Dad's hens over at 8 rods. C. T. T.

These Arms are Sold by all Principal Dealers.

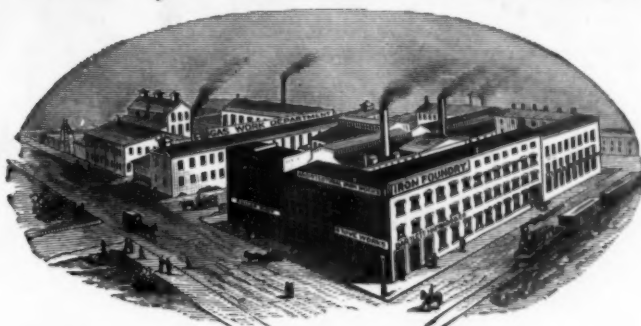
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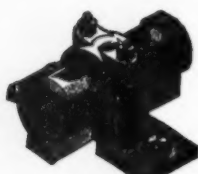
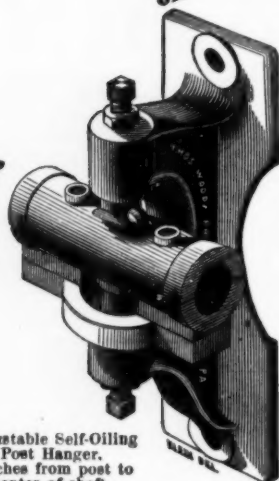
Send for Pamphlet. Send for Price-List.

List of our Gear-
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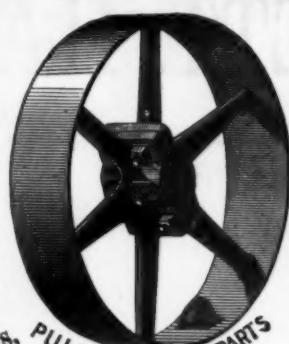
ADJUSTABLE SELF-OILING HANGER.

Ball and Socket
Self-Oiling Pillow Block.DOUBLE-BRACED ADJUSTABLE
SELF OILING HANGER.Adjustable Self-Oiling
Post Hanger.
6 inches from post to
center of shaft.Adjustable Self-Oiling
Post Hanger.
6 inches from post to
center of shaft.

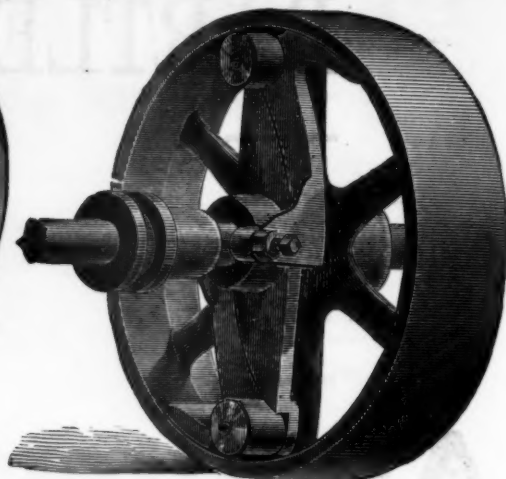
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Power Looms, Patent Bobbin or Quill
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WARPING MILLS,
16, 18 and 20 yards Circumference,
WITH IMPROVED HECKS,
SHAFTING,
With Patent
ADJUSTABLE SELF-OILING HANGERS,
8, 10, 12, 15, 18, 20, 24 and 30 in. drop.

Also WALL, POST AND GIRDER HANGERS.
Pulleys, from 4 inches to 10 feet in diameter.
PATENT FRICTION PULLEY.
Pulleys in two parts, any size required.
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Oil Presses for Lard, Fish and Paraffine.



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Simple, reliable and very durable.
Suitable for any kind of driving, they
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Special Driving,
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where possible to transmit power by belts.
PULLEYS from 4 inches to 10 feet in diameter.

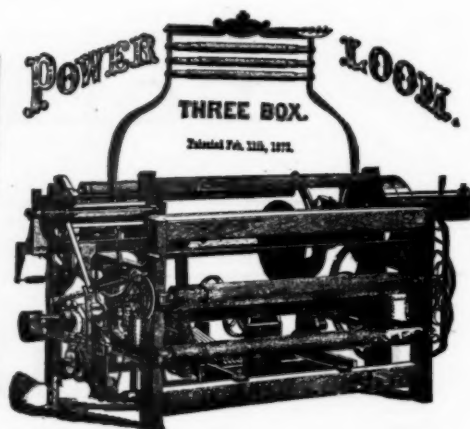
Why use old style Bearings, that require oiling
every day, when you can get Bearings at less cost
that only require oiling once in Six Months, and
thus save oil and labor enough to pay for the bear-
ings in use. Test the matter for yourselves; a
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Cylinders, 36x36 and 36x30, with 20 tops and Self-Strippers and Railway Troughs. Union Cards, with workers, strippers and tops.

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English Slubbers and Fly Frames, With Long or Short Bolsters.

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GREAT SUCCESS OF OUR

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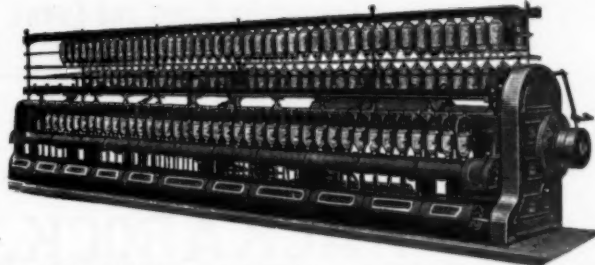
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7,000 SELF-STOPPING WARPERS, Already working with latest improvements.

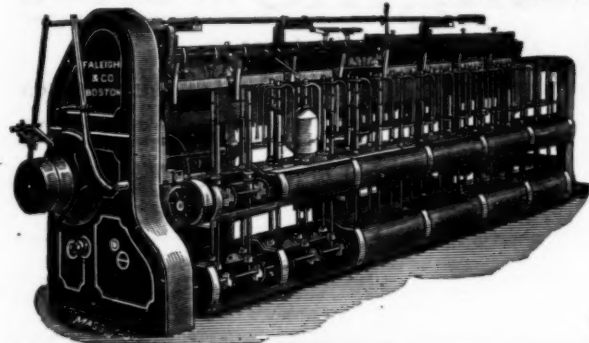
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Openers, * Lappers, * Cards, * Drawing,
Slubbing and Roving Frames,
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GOLD MEDAL AWARDED NEW ORLEANS, 1885, FOR BEST RUNNING BELTS.

*Made PERFECTLY Straight and any Length without Joints.**For Main Driving it is the Best. Much Cheaper Than Leather.*

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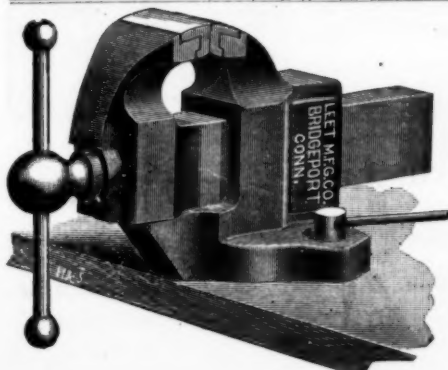
Are the Latest and Most Improved Machines that were ever designed for the work required of them. They are the Most Simple, Economical and Effective now known, and will satisfy all Purchasers.

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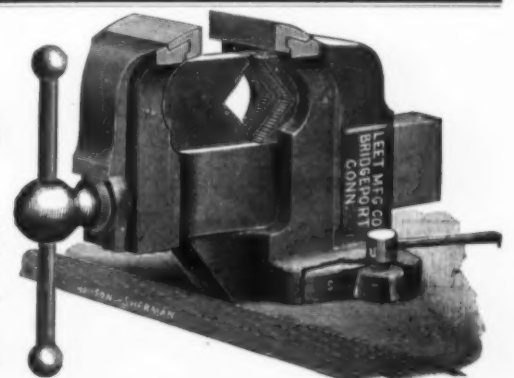
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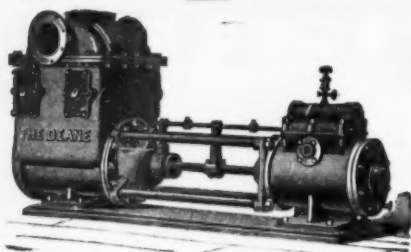
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These Vises can be used either as a Sliding Jaw or a common Screw Vise by simply turning in or out the small screw in backside of the head or base. It will hold work with a more powerful grip than any other Vise. The screw will never work loose when either chipping or filing. The workmanship is perfect; all the working parts are made of steel and interchangeable. Sold by all Hardware Dealers. Send for Descriptive Circular and Price List to

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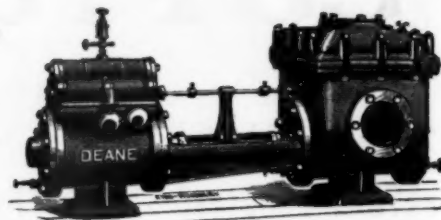
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Every variety of Pumping Machinery
VACUUM PUMPS FOR SUGAR WORK, ETC.
IRRIGATION PUMPS ARE SPECIALTIES.
Water Works Pumping Engines for Cities and Towns.

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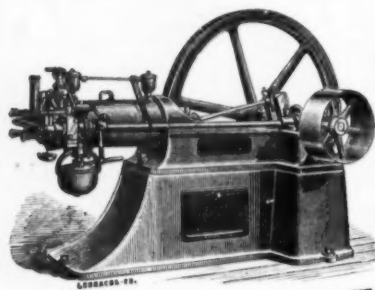
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MANUFACTURER OF THE INGREDIENTS
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IT CONTAINS NEITHER GLYCERINE NOR
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It Does Not Freeze. Can be shipped by express, railway or steamship lines. Neither of the two ingredients are explosive until combined, and when combined are safer than Dynamite. This explosive approximates Nitro-Glycerine in strength. Send for circulars to

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Over 14,000 in Use. Otto Gas Engine

20 to 70 per ct. less Gas
 consumption than
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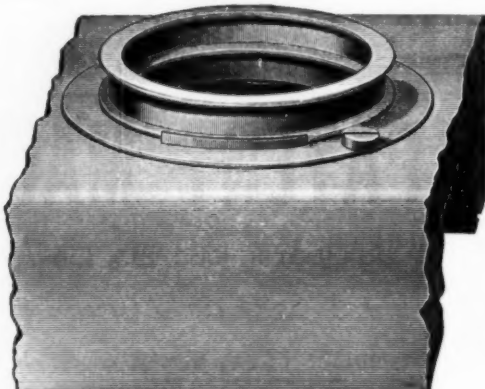
No explosions, no fires nor cinders, no gauges, no pumps, no engineer or other attendant while running. Recommended by insurance companies. UNFURPASSED IN EVERY RESPECT for hoisting in warehouses, printing, ventilating, running small shops, &c. **Sizes: 1 to 25-horse power.**

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DOUBLE ADJUSTABLE Spinning Rings.

GEORGE DRAPER & SONS,
 HOPEDALE, MASS.

TELEGRAPH ADDRESS AND RAILROAD STATION,
 MILFORD, MASS.



	Number of Rings sold.	Number of Rings sold for repairs.
1869.....	6,005.....	
1870.....	20,258.....	
1871.....	38,648.....	
1872.....	94,264.....	12
1873.....	117,301.....	
1874.....	168,382.....	500
1875.....	223,244.....	963
1876.....	185,319.....	947
1877.....	270,811.....	946
1878.....	215,214.....	3,309
1879.....	336,918.....	8,007
1880.....	507,860.....	11,264
1881.....	659,739.....	8,974
1882.....	636,715.....	22,515
1883.....	416,500.....	21,689
1884.....	319,869.....	25,105
1885, 5 mos. 112,523.....	12,118	
Total number sold in 16 years.....	4,390,260	116,349
Total number in use 4,273,911.		

The great durability of our Rings is shown by the fact that we have more rings in use over twelve years old than all we have sold for repairs.

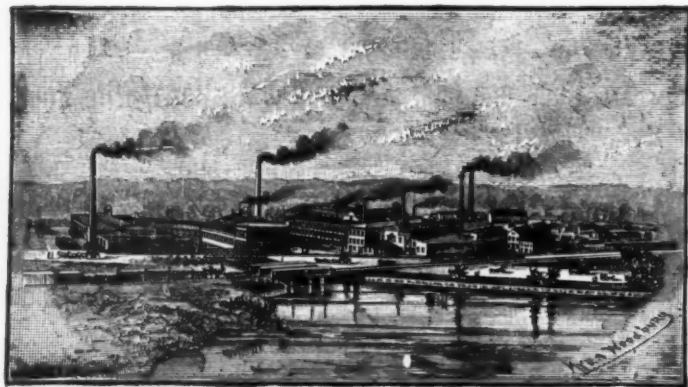
This statement shows unmistakably that a mill once supplied with our rings need think but little of the cost of repairs. As the number sold for repairs is an average of about twenty per cent. of the number sold the tenth year before, the average life of our rings will be at least twelve years.

Do not make the mistake of ordering new frames without specifying Double and Adjustable Rings. While they cost more to begin with, they are much the cheapest in the end, on account of their **uniform excellent quality and unparalleled durability.**

As an encouragement to use none but the best of Rings, we have decided to **reduce the price** on and after the first day of January, 1885, of those $\frac{1}{2}$ inches or less in diameter, without holders and screws, to be used only to take the place of our rings worn out, to 12 cents each.

Washburn & Moen Manufacturing Co., Worcester, Mass.

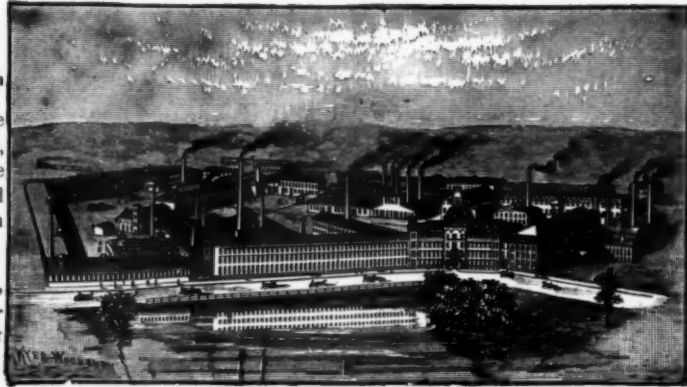
Wire Drawers, and Manufacturers of Iron and Steel Wire of Every Description.



Iron and Steel Telegraph
 and Telephone Wire.

Patent Steel Wire Bale
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 Chain Wire, Steel Wire
 for Springs, Needles and
 Drills, Watch Main
 Springs.

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 Circulars and Descriptive
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Proof against Fire, Wind and Flood.
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BALTIMORE Manufacturers' Record.

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—BALTIMORE.—

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—SOUTHERN OFFICE, ATLANTA, GA.—

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One square (14 lines Agate, 1 inch) 1 time... \$ 1.50
" " " " " 2 " " " " 3.00
" " " " " 3 " " " " 4.50
" " " " " 4 " " " " 6.00
" " " " " 5 " " " " 7.50
" " " " " 6 " " " " 9.00
" " " " " 7 " " " " 10.50
" " " " " 8 " " " " 12.00
" " " " " 9 " " " " 13.50
" " " " " 10 " " " " 15.00
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Reading Notices 50 cents per line each insertion.

BALTIMORE, AUGUST 29, 1885.

CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more.

As we have never seen any satisfactory proof of the proposed American Exhibition in London being backed by such support as to guarantee success, we have never in any way endorsed the project, and the MANUFACTURERS' RECORD has on several occasions advised the people of the South to thoroughly investigate it before preparing to make any exhibits at it. If the statements in the Paris letter of the New York World, of last Sunday, are correct, our advice was certainly needed. Some of the Southern States have been discussing the spending of considerable money to make fine displays at this Exhibition, but we hope that before doing so they will see that the scheme has the proper management.

SINCE our last issue we have received a number of reports from the South regarding the outlook for the crops and the prospects for business. They all tell the same story of favorable indications for magnificent crops.

An Increase of 65,000,000 Bushels in the Corn Crop of the South.

In our last issue we published a special dispatch from the United States Commissioner of Agriculture stating that the statistician of the department estimated the probable increase in the yield of corn in the South this year over last year at 50,000,000 bushels. We found, however, that the department in making up this estimate included Delaware as a Southern State and omitted Kentucky. Our idea, though, was to give the probable yield of the fourteen Southern States, Maryland to Texas both inclusive, and in sending a table showing the estimated acreage in each of these States for 1885 and 1884, and an estimate of the probable yield, Prof. Jas. R. Dodge, the statistician of the department, writes as follows:

"Your substitution of Kentucky for Delaware makes a material difference, as Kentucky is one of the largest corn States.

This table gives you the relative acreage, (subject to slight modifications as to 1885.) The increase is five per cent. in area. The average condition is nearly 10 per cent. better—that is, instead of 91 on the average it is nearly 100. The prospect, therefore, favors about 15 per cent. increase. The last year's product was 433,000,000 bushels. The increase on the August basis would be 65,000,000 bushels (instead of 50,000,000 without Kentucky.)"

The estimated acreage of corn in the South in 1885, as compared with 1884, is as follows:

States.	Acreage, 1884.	Acreage, July, 1885, compared with 1884, Per cent.	Acreage, 1885.
Maryland.....	608,400	104	726,336
Virginia.....	1,938,391	107	2,074,078
N. Carolina.....	2,519,927	101	2,545,126
S. Carolina.....	1,444,020	103	1,487,341
Georgia.....	2,857,700	100	2,857,700
Florida.....	403,913	104	420,070
Alabama.....	2,322,885	100	2,322,885
Mississippi.....	1,889,600	103	1,946,288
Louisiana.....	865,450	107	926,032
Texas.....	3,752,700	108	4,052,916
Arkansas.....	1,757,710	109	1,915,904
Tennessee.....	3,245,082	110	3,569,590
West Virginia.....	594,115	112	665,499
Kentucky.....	3,258,410	109	3,551,667
Total.....	27,548,303	105	29,061,342

According to the foregoing figures, the corn crop of the South will this year be about 65,000,000 bushels more than last year, or 498,000,000 bushels against 433,000,000 bushels for 1884—by far the largest crop ever produced in the South. We would not be surprised to see even these figures increased when the crop is gathered.

In 1875 the corn crop of the Southern States was only 324,000,000 bushels against a probable yield this year of 498,000,000 bushels, an increase this year of 174,000,000 bushels. The South is steadily increasing its production of corn, and hence naturally of bacon, so that in a few years it will be comparatively independent of Western corn and bacon. For years the purchase of foodstuffs from the West has been an enormous drain upon the South, but year by year this is decreasing. An increase of 65,000,000 bushels in one year shows what that section is capable of doing towards raising enough corn to meet its own requirements. There is still room, however, for much improvement in this direction, and we hope to see a still larger corn crop in the South next year.

Banking Capital in the South.

The statements that have lately appeared in the MANUFACTURERS' RECORD regarding the great need of more banking capital in the South, have received many strong endorsements from all parts of that section. It is felt by Southern business men that there must be a great increase in banking facilities or else business generally will suffer. Money to handle the South's enormous crops and for use in business transactions is pressing needed. Upon this point the Barnesville, Ga., Gazette, after republishing one of our late editorials upon this subject, says:

The above article has our hearty approbation. No country can prosper financially that has to pay such exorbitant rates of interest as the South is paying and has been paying since the war. The rates of interest range from 15 to 40 per cent., and very few persons can possibly use money profitably at such a per cent.

Not only are high rates of interest charged in the South, but there is a great scarcity of money among us.

We need more banks. The supply of money to lend is not equal to the demand to borrow. There are many towns in the South doing from two to four million dollars' worth of business annually that have not more than one bank, and that often a weak one. The business interests of such towns necessarily suffer for lack of adequate funds. Not only do manufacturers and merchants suffer from this cause, but the farming interests suffer also.

Farmers have found that it is cheaper to borrow money, if they have no money of their own, and buy for cash, than to buy on a credit; hence they as a class need a great deal of money every spring.

Millions of dollars can be put out at interest annually in the South at ten or twelve per cent. with such securities as would make the lenders absolutely safe. This is a fine opportunity for capitalists to realize a splendid per cent. on their money, and at the same time materially aid those borrowing their money.

Instead of the South needing a hundred more banks we need a thousand more. Our crops are unprecedentedly large, we are entirely over the demoralizations of the war, factories of every description are springing up all over our Southland, an era of substantial, permanent prosperity is dawning upon us, and the interests of capitalists certainly demand that they occupy this inviting field at once.

N. T. GREEN & Co., Birmingham, Ala., will shortly issue a book of 200 pages, devoted to the history and present condition of that city. It will give much information of value to those interested in Birmingham and its wonderful growth.

TELEGRAPHIC reports from the South show that the cotton crop will in some limited sections suffer from the worms, in others from drought and in others from too much rain. The damages from this cause will not, however, we think materially affect the aggregate yield, which still promises to be much the largest on record.

If you are not already a subscriber to the BALTIMORE MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year, or six months for \$1.50.

What Manufacturers Do.

The importance to the South of developing manufactures, if for no other reason than the making of a home market for agricultural products, cannot be too repeatedly urged upon the attention of the people of the South. Before there can be general permanent prosperity among the agricultural interests of the South, there must be a large increase in the non-agricultural population of that section. These facts are plainly brought out by a recent article in the Nashville Union. According to that paper:

"The Roan Iron Company was formed and commenced work at Rockwood, Roan county, East Tennessee, in 1867. The furnace was put up in the forest, and on December 4, 1868, made the first casting of Tennessee Scotch pig iron, the first pig iron made in the South by the use of mineral coal as fuel. It had an output of twenty tons. This was subsequently remodeled and another furnace built, so that now the daily output is 100 tons of the best brand of Tennessee Scotch pig iron. At no time since first blowing in have both furnaces been out of blast, and they have invariably since first commenced made money. Prior to building the furnace, land there was worth from \$1 to \$7 an acre, country very sparsely settled, but little raising of crops or cultivation of fruit. The only market was Chattanooga and the country south of there; the only means of transportation was by river—the Cherokee, a steamboat of sixty tons, making two trips a week during the season of high water, being the only conveyance above Chattanooga. See the change made by this one plant. Now land is worth \$30 to \$100 an acre. The business done caused the location of the Cincinnati Southern Railroad; then there are three loaded trains each day of metal, supplies and material. A village of 3,000 people has been built up, all of whom have to be furnished with food and supplies from the country adjoining. There is a home market for everything that is raised and every farm product at prices as good as were obtained at the distant market, when most of the price was consumed in transportation; not only ordinary farm products, but chickens, eggs, fruit and all kinds of vegetables are made profitable. The heretofore worthless timber is becoming more and more valuable every year. When there is leisure time on the farm, instead of wasting it in idleness, or worse, there is constant and profitable employment for men and teams in hauling ore and material. The result of this enterprise has developed others, and the still larger plant at Dayton is the direct offspring. Each ton of pig iron represents when loaded ready for shipment the labor of ten men one day; 100 tons a day represents the labor of 1,000 men, with all those dependent on them for support looking to this one enterprise for a livelihood. All these are consumers and must be supplied with food, fuel and other necessities by the farmers surrounding them. The labor is all home labor, the material home material and the profit home profit. This is one instance of the value of diversified industry."

THE Western & Atlantic Railroad, of Georgia have issued a folder giving the local time table of that road, which is probably the handsomest local time card ever issued by any railroad in the country. Mr. Jos. M. Brown, the general passenger agent of the road, Atlanta, Ga., is responsible for this work of art.

A FINE opportunity for the establishment of a soap factory is offered in the advertisement of "Oil Mill," under Business Chances.

The Founding of a Town.

Some weeks ago we mentioned the purchase by Dr. Clarke Whittier of 60,000 acres of land in Swain County, North Carolina, with a view to establishing saw mills, laying out a town, dividing large tracts of land up into small farms, &c. We now have a report of the inauguration of the town of Whittier, in a manner decidedly unique.

We have been informed that Dr. Whittier is a brother to the poet Whittier, though we cannot vouch for the truth of this, as we have no information on that point from the Doctor himself.

WHITTIER, N. C., August 19, 1885.

At a public meeting held by the citizens of Upper Swain Co., on the 19th of August, 1885, it was moved by S. W. Cooper and seconded by M. Zackeray, that Thomas Stallcup be chairman of this meeting. Moved by Clarke Whittier and seconded that we open operations here upon the principles of the Word of God, including all morality, and especially temperance and prohibition of the strongest form. Moved by J. M. Glance and seconded by W. A. Thomas, Jr., that the Rev. W. H. Cooper be asked to officiate.

Rev. W. H. Cooper introduced, offered the following prayer:

God of our Fathers and our God, we are met to-day in thy great name on thy footstool to found a town to be called or known as Whittier. In founding which town we recognize thy gracious hand and in this formal way, most solemnly and reverently consecrate it to Thee and the welfare of our common humanity. For the sake of Thy Son, most graciously accept our imperfect service and grant to us and our town Thy signal favor, from generation to generation. May it have a world wide fame for religion, morality and temperance. May it never be destroyed by flood or flame. May it be free from epidemic and the noisome politician. May its widows never be turned empty away, or its orphans be heard to cry for bread. May no foul murder ever be committed on its streets, or its sacred soil stained by blood. May the wayfaring man find a lodgment here and lie down and repose in safety. May its pure atmosphere never be polluted by the poisoning fumes of intoxicating liquor or mothers' tears wept over inebriate sons within its corporate limits. May the early and latter rains descend upon it. May its gardens and orchards bring forth in abundance of the good things of life. May the voice of prayer and praise be heard in all its dwellings. May the poor and oppressed of earth find a refuge here. May it be the glory of our land and of mankind. God bless the founder thy servant our benefactor, may he long live to serve God and benefit mankind. The Lord give him purity of heart, sanity of mind, health of body and abundance of means, wherewith he may glorify God and bless men. As thou didst prolong the days of thy Hezekiah, so prolong his days. As thou didst give thy servant wisdom, grant him wisdom, and may his talents for usefulness increase more and more. May we appreciate his efforts and hold up his hands by our prayer and co-operation.

And we do not forget to thank thee for the concert of action on the part of all the proprietors of the soil of which the town is formed, and who are of like principles with the founder. Make us an humble, God-loving, God-fearing people. These prayers we offer in the name of Jesus our great high priest above, to whom with the father and the Holy Ghost be everlasting praise. Amen.

After the prayer it was moved, seconded and carried that a petition be circulated and consent obtained from all property holders within ten miles of Whittier, if possible, to

prohibit forever the sale of intoxicating liquors. On motion of Dr. Whittier it was resolved that "it is the sense of this meeting that the various enterprises undertaken hereabouts meet our hearty co-operation and support in money and labor, and we invite all property holders as far as the town of Franklin, in Macon county, to the new Gap on the Smoky Mountains, on the Tennessee line, and the county of Swain, including the town of Charleston and all that part of Jackson county tributary to Whittier, to unite with us in the construction of a graded road to Franklin to the Smoky Mountains at the new and old gap; a double bridge across (best possible) the river here; a made and graded road from Whittier to the Oconee Lufly road; a graded road to connect Whittier with the road on the south-side Tuckasegee river to Charleston, and a graded road to mouth of Oconee Lufly; a graded road from Whittier to Quallatown—the shortest line, a road between the bridges on the north side of the river."

Clarke Whittier stated that he had secured from the best attorneys in the State a legal form whereby all purchasers of land in Whittier or in the 60,000-acre tract will agree that in case spirituous or malt liquors are sold, imported or manufactured for use, except as medicine or for arts, the owner shall surrender the land to Clark Whittier, or his legal representatives, on the tendering of the purchase money. THOMAS STALLCUP, Chairman.

A Wonderful Growth.

BIRMINGHAM, ALA., August 22, 1885.

Editor Manufacturers' Record:

The adjectives wonderful, great, astonishing, are misapplied ninety-five times out of every hundred they are used. Everything now spoken of or written about is said to be grand, etc. The Americans are nothing if not exaggerative.

But with a tenacity to truth I may be allowed to say of the growth of Birmingham, Alabama, that it is wonderful, astonishing, tremendous. The appellation "Magic City" is not a misnomer. In all that goes to make up a thriving city, Birmingham may justly be called "magical."

Birmingham is in Jefferson county, and lies in what is known as "Jones' Valley," which is some six miles wide. Iron, coal and limestone are so handy that it can be stated, without fear of contradiction, that most excellent pig iron can be made, is made, at a figure below twelve dollars per ton. The writer knows of a foundry here which buys nearly all its pig at 10 and 11 dollars per ton. Coal is so common that in the winter time the farmers dig it out of their lots and bring it into town in their wagons, selling it at from \$1 to \$1.50 per ton, or from four to six cents per bushel delivered.

Three large railroads, the Louisville & Nashville, the Cincinnati Southern, and the Georgia Pacific, are the feeders. A Union Depot will shortly be erected. At present it is without this valuable necessity, but that need will soon be supplied. There are five iron furnaces—coke, one rolling mill, six or seven foundries, three or four planing mills, one cotton factory, etc., etc. The cotton factory is not in operation, and is shortly to be sold. With new management it can be made to pay respectable dividends.

The town boasts of several good church buildings, three or four banks, telegraph and telephone companies, one fine opera house, hotels, club rooms, a good water works, and a good sewerage system, etc.

At the present moment 216 new buildings are going up.

Two daily newspapers, the Daily Age, morning, and the Chronicle, evening, give the natives their mental food.

The Florence is the leading hotel, and is first class in every particular. What Col. James T. Nixon and his estimable wife do not know about "keeping hotel" is not worth knowing.

The writer (an uninterested person, does not own a dollar's worth of real estate, nor anything in Birmingham outside of his, personal effects) knows of no point in the South which offers such inducements to investors as this Magical City of Birmingham. And I am told that all manufacturers desiring to erect buildings will receive excellent offers of building sites at most reasonable figures.

The low cost of iron and coal, and the nearness to all markets, North, South, East West, are, in themselves, sufficient reasons why any individual or firm seeking a location in the rapidly growing South should locate in Birmingham; destined to be, before many years, the largest city in Alabama and the most thriving in the South. The population to-day is between 19,500 and 20,000; in 1900 it will be sixty or seventy thousand. So prophecies

FONT.

The Development of an Alabama Town.

CLANTON, ALA., Aug. 22, 1885.

Editor Manufacturers' Record:

This letter is written from one of the "coming towns" of Alabama. The place has made wonderful improvement during the past year, and is moving onward and upward with astonishing strides. Clanton is the geographical center of the State. It is high up in the invigorating hill country of Alabama, free from malaria and epidemic diseases. The water here is the purest and best to be found on God's green earth. The atmosphere is dry,—the soil being sandy and absorbing moisture very rapidly. The town is on the Louisville & Nashville Railroad, forty miles north of Montgomery.

A HOT WELL.

Recently a well was dug for the purpose of supplying a saw mill near our depot with water. At a depth of thirty feet water was reached, but the supply not being sufficient, the proprietor of the mill decided to go deeper. He stopped at the depth of fifty feet, for he found it impossible to go further, the stream of water reached at that depth being as hot as sheol seventy times heated. The water is not warm, but is hot, being 162° Fahrenheit, which is two degrees hotter than the water of the famous Arkansas Hot Springs. An analysis shows that it possesses medicinal properties identical with those of the Arkansas springs. Bathing in and drinking the water has brought about a number of remarkable cures of paralysis, rheumatism, scrofula, &c., and the wonderful freak of nature has caused a boom in real estate in this vicinity. The well is fifty feet deep and has twenty feet of water. It is likely to prove a bonanza to the owner; and is bringing large numbers of the afflicted from all portions of the State to the town. Some of the cures effected have been wonderful. The proprietor will not sell a half interest in the well for less than \$25,000.

OTHER NOTES.

In the vicinity of Clanton are a number of saw mills,—it being the center of a fine timber industry. In the county there are about twenty-five lumber mills, turning out at a low estimate about 300,000 feet of long-leaf yellow pine lumber daily. Two and a half miles east of Clanton, Mr. T. M. Ter-nan has a small mill with a capacity of 4,000 feet a day. Near him Mr. E. H. Lowe has a mill somewhat larger. Near our depot Mr. S. A. Blessingame has a mill which is capable of cutting about 10,000 feet per day. L. B. Wells & Son, four miles east of Clanton, have a mill with a capacity of 10,000 feet per day. Two miles north, Mr. J. F. Maul has a still larger one with a capacity of from 15,000 to 20,000 feet per day; and two and a half miles south Bivings, Duke & Co. have a large mill, which can turn out steadily about 30,000 feet of lumber daily. Several of these mills have planers attached, and all have dry kilns. At the depot we have a well-conducted planing mill, which is independent of the saw mills,

and dresses lumber for the smaller mills that have no planer. It is patent to any business eye that here would be a good location for a sash, door and blind factory, and it is not a little strange that one has not been established before.

Each of the enterprises mentioned above is doing well, and it can be safely said that they turn out the best quality of long-leaf yellow pine lumber found in the country. There is a great future ahead for the town and section. Capitalists are invited to "come and see" before investing.

W. H. L.

General McClellan's Enterprise.

General McClellan, according to a Texas paper, is utilizing in his old age some information which he acquired in his youth when in that part of the country as an officer in the regular army. In the spring of 1852 General McClellan, who was then a brevet captain, was ordered by Jefferson Davis, the secretary of war, to accompany an expedition that was sent out to explore the Red River of the South, the waters of which above Cache creek were unknown. From the Indians the War Department had learned that the rivers flowed beneath the sands of what was then known as the Great American Desert. Capt. R. B. Marcy led the expedition.

On the morning of the 12th of May the party was encamped where the Wichita river flows into the Red. After cutting down the banks of this stream to allow the wagons to get down into it and make a ford, the expedition passed on up the Red river until they reached Cache creek. During the day they found the surface of the ground covered in places with detached pieces of copper ore which had been washed out of a gully. Specimens of this ore were saved and afterwards analyzed in Washington. They were found to be very rich in metal. At Cache creek, which flows through the southwestern part of the Indian Territory, the expedition remained in the camp until the morning of the 16th, and then proceeded 15 miles up stream. More copper ore was found, which proved to be, on chemical analysis at Washington, a new species, and which averaged 54½ parts of copper to the 100. The Red river actually flowed through banks of almost solid copper ore at that place.

After 30 years General McClellan has organized a company, patented 36,000 acres of land, and begun to work this rich deposit of ore. His representatives say that the company can break even the present low price of copper by four cents, and yet have a bonanza richer than the Comstock. While copper is apparently all that the company proposes to mine for, it was not the only valuable find of the expedition. The 29th of May found them on the bank of Otter creek. In the hills through which this creek runs were found specimens of gold-bearing quartz, which led Capt. Marcy to make a casual examination of the washings of the creek. Several particles of pure gold were found in a few minutes. The soldiers had no time to go washing for gold, and everybody else in the country was just then trying to get to California; so this discovery passed unnoticed. As the gold is in Indian Territory, and no one has been near the place since except the Indians and cowboys, no rediscovery has been made.

Perhaps a less important but not a less interesting discovery was made on the return trip, when passing through the Wichita mountains, as they are called, although the highest rises only about 700 feet above he plain. That discovery was the finding of petroleum. It was found oozing from the foot of a precipice, and was described very accurately by the geologist of the expedition.

If Northern Texas and Southwestern Indian Territory should become a mining region, one of the most beautiful parts of this country would be ruined in the eyes of herdsmen and sportsmen. Prairie and woodland

and rolling hills and fertile valleys alternate. Herds of deer and antelope roam almost undisturbed over the flower-decked carpets of grass that are green almost the year round, while flocks of wild turkey and swarms of prairie chickens, quails and pigeons abound everywhere. To give zest to the chase an occasional cougar is found in the thickets. The air is bracing. Springs of cool pure water bubble from the rocks among the hills. The soil is of wonderful fertility, and in every way this is the ideal happy hunting ground of the red man. It only needs a railroad or two and the influx of enterprising people to change it into the richest farming community as well as mining district in the State.

Advantages of Bristol, Tenn.

BRISTOL, TENN., August 21, 1885.

Editor *Manufacturers' Record*:

As your correspondent, Mr. A. A. Hobson, has kindly introduced me to your readers through his article headed "Still Another Pittsburg of the South," published in your issue of the 22d instant, and you solicit correspondence "relating to the material interests of the Southern States," I am induced to call the attention of your readers, and particularly those who are looking for manufacturing sites, to the superior advantages offered by Bristol for a tannery, a hub, spoke and handle factory, iron furnaces, foundry and machine shop, and furniture factory, not to mention other manufacturing enterprises, for which the natural resources near and tributary to Bristol cannot be surpassed by any place on this continent. Even with our present limited railway facilities I am surprised that this point has been so long overlooked. With the prospect before us of soon getting four additional railroads, we invite all interested in starting new manufacturing establishments of any description in the South to visit our city and section of country and investigate the advantages here offered as to natural resources and facilities, accessibility to markets, climate, &c., &c., before locating.

ISAAC D'ISAY,
Late of Indiana.

THE Knowles Steam Pump Works have issued a "Revised 1885 Edition" of their illustrated catalogue, which is complete in every particular. It is printed in a very attractive manner and in the highest style of the art. It illustrates and describes numerous specialties that this company are manufacturing, many of which are entirely original with them. Particular attention is called to their Portable Boiler and Steam Pumps on wheels, illustrated on pages 14 and 15; Stationary Fire Apparatus, pages 18 and 19; Compound Condensing Mining pumps, pages 28 and 29; Sinking pumps, pages 30 and 31; Artesian Well pumps, pages 38 and 39; Condensers for Steam Engines, pages 52 to 55; Combined Air and Circulating pumps for Surface Condensers, pages 56 to 59; Vertical Wrecking pumps, pages 62 and 63; Vacuum Pumps for Sugar House Vacuum Pans, pages 64 to 71; Hydraulic pressure pumps, 78 to 81; Duplex Steam and Power pumps and Compound Condensing Duplex Engines for Water Works, pages 84 to 95. The last five pages of the book give much useful information and tables of value to Engineers and others. This catalogue will be sent free upon application to the Knowles Steam Pump Works, 93 Liberty Street, New York.

THOS. M. TAYLOR, of the Georgia Scale Co., Atlanta, Ga., has applied for letters patent for a new Railroad-Track Scale. He has sold two and is manufacturing others: It is a new device and is a good one. The scale is bridged over like a railroad bridge, and the platform is bisected for rails, which weigh either empty or loaded cars. The other part of the platform is perfectly solid, upon which dead rails may be placed at any distance beyond six inches from movable rails. This solid decking prevents all changes in balance from any causes whatever. There is perfect protection from rain, snow, or accumulations of any kind.

Frech's Superior Power Punching Press.

The accompanying cut represents Frech's Superior Power Punching Press, which is made in three different sizes, the illustration showing size No. 2. The principal feature of this machine is an entirely new slide-movement. The connection rod from crank-shaft to slide is one solid piece of forging with a metal-bearing inserted in its upper end. The lower end has a flattened V thread and passes through a steel ball socket. This ball socket is nicely fitted in the centre of slide and in running order, swings or turns in the slide according to the movement of the connection rod. In the ball-socket and towards the top, there is also a steel nut inserted, which on its upper side has a number of slots milled in, to receive a catch or lock. The nut is nicely fitted on the threaded end of the connection rod, which passes through both nut and ball-socket, being provided

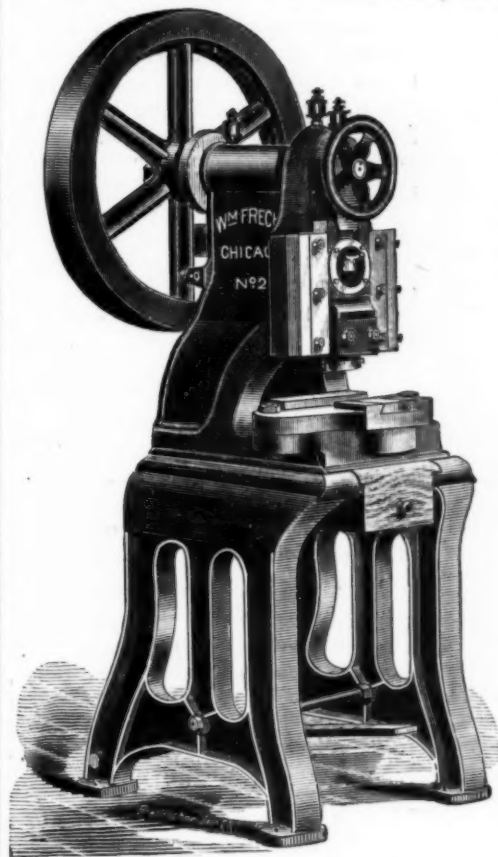


FIG. 1—FRECH'S PUNCHING PRESS NO. 2.

with a number of holes to receive a pin or wrench.

By adjusting the slide and setting the die all that is required to do is to raise the lock and turn the nut to the right or left, according to adjustment required, up or down. The simplicity and rapidity of this adjusting device will be seen at a glance, besides it is of great durability, consisting of but three pieces arranged in such manner that the pressure is always right in the centre and in perfect harmony with the whole.

The frame of this press is of beautiful design and very strong, forming on its upper part a solid wall, opening toward the bed-plate, and so forming a solid back and at the same time a back open press. This renders it very convenient to feed the work right through the press, or from and towards the operator, which is in a good many instances a great saving of material. The legs are sufficiently bent in on front, to allow the operator to work with ease and to get as close to the work as required. A drawer for catching punchings is attached right under the bed and rests on projections of the legs. The small hand-wheel in front of the machine is to more easily set the dies while the fly-wheel is in motion.

The clutch on this press is also an entirely new feature. It has no springs attached whatever and consists of but two hardened steel pieces,—a pin, in which a flat piece of

steel is inserted, swinging on a pivot. By running the press, one end of this flat steel piece will engage while the other will disengage according to the movement of threadle and so render it a dead sure clutch with no springs to come out of order and no accidents. All parts of this clutch which come in contact with each other are hardened steel, and being very simple in its construction, its durability and excellence is assured.

The press is provided with glass oil-cups to keep dust and dirt from its bearings. The movement of the slide is usually 1 inch, but will also be made 1 1/4 and 1 1/2 inches, as may be required, and the adjustment is 1 1/4 inches. The press is also provided with a steel socket having a 1 1/4-inch square shank and 7/8-inch hole to receive the punch. The bed-plate will take in dies from 1/2 inch to 5 inches wide, and is very convenient by setting dies. The opening in the press is 5x8 inches, and any kind of a bed-plate can be attached for larger work. This press does away with numberless inconvenient extra tools to operate and adjust it. It requires but one solitary tool, which has the shape of a wrench on one end, and serves as a pin or arbor on the other. The machine is built with a view to answer all purposes for light metal work. It can be run at a very high speed, and is especially adapted for the manufacture of hardware specialties, lock manufacturers, clock and watch facto-



FIG. 2.

ries, sewing machine attachments, and novelties in general. The fly-wheel is 28 inches diameter, 4-inch face, weighs 325 pounds, and makes from 100 to 125 revolutions per minute. The weight of the whole machine is 1,500 pounds.

The press is very substantially built, of good and accurate workmanship in all its details, and is manufactured by William Frech, 68 and 70 West Monroe street, Chicago, Ills.

The Atlanta Rubber Co.,

of Atlanta, Ga., is doing a good business in the South. They are jobbers of India rubber goods adapted to mechanical purposes; are manufacturers of leather belting and fire hose. They are agents of the New York Rubber Co. and for Hoyt's leather belting; also make and handle druggists' sundries, rubber boots, shoes, clothing—everything, in fact, in the rubber line. They keep in stock a large supply of all kinds of belting hardware, such as hooks, rivets, etc., etc. The house prides itself on its rapid filling of all orders.

If you are not already a subscriber to the *BALTIMORE MANUFACTURERS' RECORD*, send us \$3 and you will receive it regularly for one year, or six months for \$1.50.

MR. L. ALMA TADEMA contributes the frontispiece to the September number of *The Magazine of Art*. The picture is taken from the original in the Grosvenor Gallery, and is called "Who is it." Three girls are on the top of a house and one is peeping over the rampart to see who is coming. The design is a little out of Mr. Tadema's usual style, although it still portrays the classic maiden of ancient Greece. Another page picture is "Unvalued Liberty," from the original by Kaulbach—an old monk has opened the window of his cell to let a bird fly from its cage, but the bird prefers captivity with the old friar to liberty without him. "The Secret," from Mr. E. Blair Leighton's Royal Academy picture, is given another page. We have a monk in this too, a monk to whom a dying man is telling his secret in the hope of being forgiven. There is another paper on "The Dart," a river whose picturesqueness we are enjoying through the graphic pen of Mr. Arthur Blaikie and the clever pencil of Mr. Allan Barrand. Following this comes Mr. Austin Dobson with a paper on the Polish etcher-painter, David Chodowiecki, illustrated with reproductions from his copperplates. Curious old fashioned work it is; just the sort that Mr. Dobson knows how to describe. This in turn is followed by Mr. Andrew Lang in a poem, "On Calais Sands," to which Mr. Seymour Lucas has given a page illustration. Cassell & Co., limited, \$3.50 a year.

DR. W. T. BARNARD has the lead in the September "Popular Science Monthly," and opens an able and elaborate discussion on "The Relations of Railway Managers and Employees." This is an interesting branch of the great labor question, and presents many of its problems in a light especially favorable for critical study. Dr. W. G. Thompson considers "The Present Aspect of Medical Education," and gives much information and many valuable suggestions upon the subject. The "Insect Fertilization of Flowers" is an extremely interesting and beautifully illustrated article by the German botanist Behrens, and is full of nice points on this curious topic. Dr. Mary Putnam-Jacobi concludes her essay, "An Experiment in Primary Education," in the present number. "The Fauna of the Sea-Shore," by Mosely; Dr. Brehm's "Siberia and the Exiles"; "How Spelling Damages the Mind," by F. A. Fernald, are readable articles; while that by Professor Langley, on "Sunlight and the Earth's Atmosphere," is a brilliant and striking performance. Dr. Ray Lankester makes report on "The Recent Progress in Biology"; J. G. Frazer expounds "The Primitive Ghost and his Relations," and Mascart contributes a most interesting article on "The Physiology of Colors."

THE most astonishing literary success of the day is Miss Cleveland's book "George Eliot's Poetry and Other Studies." It has had a remarkable sale; in six weeks it has run through ten editions and there seems to be no falling off in the demand for it. It is being translated into Russian, French and Italian. The most exacting critics have praised it. The New York Sun says of it:

"Miss Cleveland's literary style is characterized by vigor of expression, abundance of imagery, and a certain rhythmic quality that makes passages here and there read almost like blank verse. Her frequent use of figurative language, often in metaphors original in conception elaborately wrought out, shows the power and scope of a fancy which a somewhat severe intellectual habit has not wholly restrained. * * * The problems of ethics, and disputed points of aesthetics, and the conundrums of history she grapples with eagerness; and whether we find her sharply challenging the opinions of a leading infidel, or subjecting to critical analysis the emotional side of Joan of Arc's character, we find her equally positive, aggressive and interesting."

The publishers announce that they will at once issue a subscription edition of the book. It will be illustrated, and will be sold exclusively by subscription. Price, \$2.00.

CONSTRUCTION DEPARTMENT

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

Industrial Progress of Two Weeks.

The last two weeks of the last month of summer, despite the usual dullness to be expected, have shown a remarkable activity in the organization of new industrial enterprises throughout the South. The splendid crops have imparted new life to business, and preparations are being made for great activity in industrial and trade circles. Among the most important enterprises reported by the MANUFACTURERS' RECORD during the last two weeks have been: In Alabama a \$300,000 company to build a large elevator storage warehouse and flour mill at Montgomery; a 200,000 bushel grain elevator; a company to develop a seaport near Mobile, construct a 28-mile railroad, build wharves, &c.; a furniture factory at Calera; carriage factory at Eufaula; sash and door factory at Gadsden; foundry at Selma, and foundry and machine shop at Sheffield. In Florida a \$500,000 lumber company, an ice factory at St. Augustine and another at Tampa, and probably extensive additions to railroad machine shops at Palatka. In Georgia a cotton seed oil mill at Columbus will double its capacity; at Macon work has commenced on a large fertilizer factory; Atlanta is to have a large piano factory at a reported cost of \$75,000; a carriage factory has been organized at Elberton; a \$20,000 ice factory company at Savannah, and many saw mills, flour mills, gins, &c. Kentucky has at Bellevue a \$20,000 light company; at Greenup a spoke factory is going up; arrangements have been about completed for very extensive coal mining and shipping operations near Cloverport by English capitalists; in Louisville a \$100,000 railroad switch manufactory has been organized; at Crittenden contract let for a large flour mill. In Maryland there is a \$200,000 mining and milling company, a \$100,000 hedge fence company, \$200,000 being put into bottling works, building of a glass factory commenced, soapstone quarries and mill put into operation, three canning factories, a flour mill and a saw mill being built. Mississippi has a \$30,000 canning factory company at Mississippi City, a large canning factory at Hindsborough, and at Grenada a compress is being erected. North Carolina is adding to her tobacco factories by new ones to be built at Winston and Asheville; in Wilmington a \$500,000 creosoting oil manufactory has been organized, and in the mining sections there are important developments. In Tennessee an extensive shoe factory, and possibly two, will be started at Nashville; preparations are being made to build a furniture factory in Maryville; a furniture factory is under construction at Rogerville; a marble quarry is being opened near the same place; an ice factory at Clarksville will be doubled in capacity; machine shops and planing mills at Chattanooga will be enlarged; a machine shop is to be started in Nashville, and quite a number of small enterprises throughout the State.

In Virginia a \$100,000 company has commenced the development of a granite quarry near Richmond, where from 200 to 1,000 hands will be given employment. The foregoing is merely a condensed summary of a few of the most important enterprises reported in two weeks only in our Construction Department. It shows something of the activity now prevailing in the establishment of new industries in the South, even during what is usually a dull summer month, and gives promise of what may be expected during the fall and winter.

ALABAMA.

J. W. Carlin, Gadsden, Ala., will remove to Scottsboro, Ala., September 1st and put up a sash, door and blind factory.

A sash, door and furniture factory is to be established in Calera, Ala.

The Capital Street Railway Co., Montgomery, Ala., expect to increase their capital stock from \$30,000 to \$60,000.

Theo. Pruden, Eufaula, Ala., is building a carriage factory.

The Standard Gin and Machine Co., Montgomery, Ala., whose planing mill is reported in this issue as burned, will rebuild at once.

Iron ore land has been leased near Anniston, Ala., from A. R. Smith and Jones Cobb of that city. Lessee will probably mine ore largely.

C. B. Tyler, of Circleville, Ohio, contemplates moving his furniture factory to Montgomery, Ala., and adding to it a sash and door factory.

The Union Warehouse & Elevator Company, capital stock \$300,000, has been incorporated at Montgomery, Ala., with John R. Tyson, secretary, and F. H. Merritt, general manager. Will erect a warehouse to hold 20,000 bales of cotton and an elevator; also probably a cotton pickery and flour mill.

Work has been commenced on the furnace previously reported as to be built in Birmingham, Ala., by the Williamson Iron Co.

The contract which has been pending for some months between the Alabama Improvement Co., of Sheffield, Ala., and R. G. Hervey, of New York, regarding the building of the Sheffield & Birmingham Railroad has been signed, Mr. Hervey agreeing to commence work on the road at once.

Brooks, Tyler & Barker, Selma, Ala., founders and machinists, have purchased ground on which to erect a new foundry, 40 x 100 feet.

Joel Bradley, of Anniston, Ala., and others, have organized a company to develop a gold mine in Cleburne county, Ala.

Mr. Eastman, Birmingham, Ala., is opening a coal mine 12 miles from that city, and will employ about 100 hands.

ARKANSAS.

C. M. Neel, Pine Bluff, Ark., is now putting three 20-ton presses into his cotton seed oil mill.

FLORIDA.

L. W. Hamlin, Cedar Keys, Fla., has put up machinery for making a combined wire and picket fence.

Thomas McMurray, Jacksonville, Fla., contemplates starting a carriage factory.

E. F. Joyce has completed a building in St. Augustine, Fla., where he will shortly put in machinery for manufacturing ice.

The proprietor of the Mayo Ice Factory, Sanford, Fla., will build a 10 ton ice factory in Tampa, Fla.; is now looking for machinery.

Wm. Davidson, Milton, Fla., is erecting a grist mill at Bagdad, Fla.

It is rumored that the St. John's Railroad Co. will extend their road from St. Augustine to Palatka, Fla.

GEORGIA.

The T. A. Snider Preserving Co. have lately established a fruit canning factory at Griffin, Ga.

A street railroad company is being organized in Athens, Ga.

The Macon Cotton Seed Oil Mills Co., Macon, Ga., previously reported as intending to build a fertilizer factory, have commenced on the building, which will be 200 by 125 feet.

J. T. DeJarnette, Eatonton, Ga., will, so it is stated, build a hotel at Oconee Springs, Ga.

Gaines & Lewis, Kingston, Ga., are enlarging their flour mill and putting in new machinery.

Bills have been introduced into the Georgia legislature to authorize the Anniston & Chattanooga Railroad Co. to build a road from the Alabama State line to the Tennessee State line, to incorporate the Columbus & Northern Railroad, the Athens & Jefferson Railroad Co., and the Darien Short Line.

Mattox & Hudgens, Elberton, Ga., are putting the machinery into their flour and saw mill.

The Elberton Manufacturing Co. has been organized at Elberton, Ga., to manufacture carriages, wagons, &c.

The Gorrie Ice Manufacturing Co. has been organized in Savannah, Ga., by H. D. Straton of Columbus, Ga., and others, to establish an ice factory in the former place. Paid in capital \$20,000.

McDanell & Maples have erected a large cane mill at Lifsey's Store, Ga.

It is reported that C. J. Finger & Co., Gainesville, Ga., will enlarge their steam shoe factory.

The Georgia Improved Piano Co., we are informed, will establish a large piano factory at Atlanta, at a reported cost of about \$75,000.

C. F. Stephens, Livingston, Ga., is building a ginny: T. V. Sanford, same place, is rebuilding a ginny and grist mill. Drewey Vaughn contemplates erecting a saw mill, and Flooker & Sanford have lately put up a saw mill.

John M. Edwards has erected a cotton gin near Milledgeville, Ga.

Andrew Campbell has sold the Arkwright Cotton Mill, Savannah, Ga., to George and William Campbell.

T. F. Lawson has established a basket manufactory at Athens, Ga.

A broom factory has been started in Atlanta, Ga., by A. P. Eskridge.

A saw mill and gin are to be erected at Creswell, Ga.

KENTUCKY.

R. S. McNay, Crittenden, Ky., previously reported as to build a flour mill, has awarded the contract for its execution to B. F. Lemon.

Gleason & Gosnell, Louisville, Ky., who are working on the canal and harbor improvement, will soon put a large number of men to work, and will also operate a number of steam drills in removing stone.

The Curlin Switch and Crossing Co., has been organized in Louisville, Ky., capital stock \$100,000, to manufacture railroad switches and crossings by J. E. Reeves, H. D. McHenry, W. P. Semple, J. W. Baird, Geo. S. Allison, Wm. Semple and W. H. Johnson.

LOUISIANA.

Sam'l. H. Buck and others, New Orleans, have organized the Exposition Railway Co., capital stock \$40,000; have awarded contract for building the road to Rogers & Ballentine, of New Orleans.

A. Denis, near Pointe Coupee, La., is erecting a steam gin.

MARYLAND.

The Co-operative Druggists Glassware Manufacturers' Association, previously reported as organized in Baltimore, Md., capital \$10,000, are erecting their factory at Mt. Winans, Md., and will employ about 150 hands.

S. B. Silver & Bro., Deer Creek, Md., whose canning factory was burned last week, loss \$6,000, are rebuilding.

Daniel Harvey, Wilna Mills, Md., will rebuild his flour mill and put in roller machinery.

The Furniture Workers' Union No. 6, of Baltimore, have decided to establish a furniture factory under the name of the Furniture Workers Productive Association.

Frank W. Redden, Greensborough, Md., is putting up a saw mill near Denton Bridge.

Richard S. Dodson, St. Michaels, Md., will erect an oyster canning house.

G. W. Tyler, St. Michaels, Md., previously reported as intending to rebuild his oyster packing house, lately burned (loss \$6,000) has commenced work on the building.

Gail & Ax, Baltimore, have commenced work preparatory to building a large addition to their tobacco and snuff factory.

Josiah Harp, Myersville, Md., is rebuilding his flour mill.

MISSISSIPPI.

J. D. Hayward, Herman Roehl and R. G. Bush, all of New Orleans, La., have organized at Mississippi City, Miss., the Gulf Coast Canning Co.; capital stock \$30,000, with privilege of increasing to \$50,000. The works, 45x100 feet, are nearly completed, and have been filled with the latest improved machinery for canning.

NORTH CAROLINA.

A large band saw mill is being erected in Waynesville, N. C.

Henry Behring, who received the contract to build a court-house at Monroe, N. C., having failed to give bond, contract has been awarded to J. T. Hart for about \$20,500.

Extensive preparations for gold mining are being made at Georgetown, N. C.

The Jordan Warehouse Co. has been organized in High Point, N. C., to build a brick tobacco warehouse 76x150 ft.

Reynolds Bros., Sunny Side, N. C., are preparing to enlarge their tobacco factory.

It is reported that J. C. Buxton will erect a hotel at Piedmont Springs, N. C.

G. F. Lancaster is erecting a saw and grist mill at Vanceboro, N. C.

B. M. Perrow, Asheville, N. C., is preparing to establish a tobacco factory.

Andrew Smith, Ludwig Hansen and others, Wilmington, N. C., have organized the Carolina Oil & Creosote Co., capital stock \$500,000, to manufacture creosote oil and preserve wood by patented processes. The present works of Hansen & Smith will be made the basis of operations for a while.

LOCKWOOD, GREENE & CO. MILL ENGINEERS

Office, 65 Westminster St., Providence, R. I.

Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

The North State Gold and Copper Mine, office Baltimore, Md., will push the development of their gold mine in North Carolina.

SOUTH CAROLINA.

J. A. Oldham, Greenwood, S. C., reported as contemplating building a cotton seed oil mill, has abandoned the idea. Mr. Oldham has lately put up a ginnery, and a mill for grinding cotton seed for fertilizers.

A sash door and blind factory is being put up in Blackville, S. C.

It is rumored that a cotton seed oil mill will be built at McCormick, S. C.

J. P. Smith, manager of the Manganese Mining Co., McCormick, S. C., will enlarge mining operations.

TENNESSEE.

The Sweetwater Mills Co., Sweetwater, Tenn., whose flour mill was burned some months ago at a loss of about \$30,000, have commenced rebuilding.

Walter Bros., Dover, Tenn., have just put up a grist mill.

Bowling Bros., Clarksville, Tenn., will double the capacity of their ice factory, put in new machinery, &c.

N. C. Boyd, previously reported as having purchased a site in Maryville, Tenn., on which to erect a furniture factory, is preparing to commence work on the building.

Negotiations are pending for the establishment of a pottery in Jackson, Tenn.

Halls, Ordway & Mitchell, Nashville, Tenn., will establish a shoe factory; will shortly purchase machinery sufficient to employ 300 hands.

Willingham & Co., Chattanooga, Tenn., will enlarge their planing mill by the erection of an additional building.

Goodall, Fite & James, Nashville, Tenn., contemplate establishing a shoe factory.

Truxall & Dunmeyer of the Enterprise Machine Works, Chattanooga, Tenn., will erect a new brick building 100x140 ft.

John Wilson, Dyersburg, Tenn., it is reported, will build a cotton seed oil mill.

\$20,000 has been subscribed for the building of the new street railroad in Knoxville, Tenn. M. E. Thompson is at the head of the company. It has been organized as the Mayberry & Bell Avenue Street Railroad Company.

E. W. McKennon has leased and is repairing the Cross Mills, Mount Pleasant, Tenn.

A. P. Smith, John A. Campbell, G. W. Fuller, J. H. Bragg, John A. Moon, W. M. Wilhoit and S. P. Ashley have incorporated in Chattanooga, Tenn., the Chattanooga & Mission Ridge Street Railroad Co., to build a street railroad from Chattanooga to Mission Ridge, Tenn.

There is talk of a company being formed to open and develop stone quarries near Chattanooga, Tenn.

The Three Forks Flouring Mills, Staley, Tenn., are being repaired.

Hughes & Morton have erected a large distillery five miles from Hillsboro, Tenn.

The Turley Mill, Cog Hill, Tenn., has been sold to N. B. Dunn.

The addition of machinery for the manufacture of railroad spikes, is being considered by the Lookout Iron Co., A. M. Johnson, President, Chattanooga, Tenn.

The Columbia Cotton Mill Co., of Columbia, Tenn., are putting some new machinery into their Laurel Hill Cotton Factory.

TEXAS.

A large elevator will probably be built in Dallas, Texas.

The Beaumont Iron Works, Beaumont, Texas, will erect a large addition to their foundry.

The \$75,000 to be raised in Fort Worth, to assure the building of the Fort Worth & New Orleans Railroad has been secured.

A. B. Williamson, Palestine, Texas, proposes to build a flour and meal mill.

A stock company has been formed to supply Pecos City, Texas, with water.

Brainard Rorison, secretary Jenny Electric Light Co., Indianapolis, Ind., is in Sherman, Texas, negotiating to put an electric light plant in that city.

A court-house and jail will probably be erected at Pecos City, Texas.

The editor of the Citizen, Glen Rose, Texas, is corresponding with a paper manufacturer, with view to having a paper mill started at that place.

VIRGINIA.

The office of the National Granite Co., reported last week as having commenced the development of a large granite quarry near Manchester, Va., is 312 Stock Exchange Place, Philadelphia.

Lutz & Handy, Lewisburg, Va., have lately established a flour mill.

Frank Lyman, 130 Water street, New York, previously reported as having purchased the old "Dolly Ann" Iron property in Virginia, will shortly commence mining operations; price is reported at \$30,000.

J. W. Stipe has overhauled and repaired his Rowland Flour Mill at Brucetown, Va.

Rohr & Hile, Harrisonburg, Va., have established a brick yard.

WEST VIRGINIA.

B. W. Peterson, Wheeling, W. Va., has prepared plans for water works in Wellsburg, W. Va., to cost \$25,000. Mayor of Wellsburg can give particulars.

The American Brick Paving Co., of Charleston, W. Va., has been incorporated.

Henry S. Walker, Secretary Board of Public Works, Charleston, W. Va., will receive bids till September 11 for the erection of an \$85,000 school building.

J. V. A. Fowler, East Liverpool, Ohio, writes that a company in that town desire to establish a stoneware pottery in the South.

BURNED.

Distillery of Thomas & Royster, Harrods Creek, near Louisville, Ky.; loss \$5,000.

Saw mill of C. Hadder, Blacks & Whites, Va., wrecked by boiler explosion.

Planing mill of Standard Gin & Machine Co., Montgomery, Ala.; will rebuild at once.

Tobacco factory of W. A. Archer, Spring Hill Academy, Tenn.

The lumber mill of W. T. Fagan, fourteen miles east of Texarkana, Ark. Loss \$1,800.

J. W. Harrell's gin house, near Clinton, La.

A \$300,000 Elevator Co.

MONTGOMERY, ALA., Aug. 24, 1885.

Editor Manufacturers' Record:

The Union Warehouse & Elevator Co. has been incorporated here with a capital of \$300,000, and have organized with Mr. F. M. Gilmer as president, Mr. John R. Tyson, secretary and treasurer, and F. H. Merritt as general manager. The company will be ready for work by 15th September, 1885.

Another evening paper to be issued here about 1st October, 1885, by Thos. B. Stubbs, now publishing the Monday Herald. Everything is booming here. WATTS & ROGERS.

Will Rebuild Planing Mill.

MONTGOMERY, ALA., August 24, 1885.

Editor Manufacturers' Record:

We were burned on the 19th; building and machinery total loss; insurance ample to cover; lumber yard saved. Have commenced to rebuild, and expect to be at work again inside of 30 days, with new and improved machinery.

THE STANDARD GIN & MACHINE CO.

A Big Granite Quarrying Co.

PHILADELPHIA, PA., August 19, 1885.

Editor Manufacturers' Record:

Our company was organized in June, 1884, under the laws of the State of Virginia, with a capital of \$100,000. We own upwards of 100 acres of land on the James river, opposite the city of Richmond, Va., on which is a developed granite quarry with a breast now open, 20 feet in depth by 200 feet in length. This property was originally known and worked as the "James River Granite Quarry." The quality of the granite is pronounced by experts to be among the best found in any section of America, being entirely free from all imperfections and streaks. The State, War and Navy Building, Washington, D. C., is built from this granite, and that building is acknowledged to be the handsomest granite structure in this country. We have 2,000 feet water front on the James river and the opening of the quarry is within 100 yards of our wharf; so that, being on tidewater, we have unexceptionable transportation facilities. In addition, we control another wharf in the city of Richmond.

The demand for our granite for building and monumental work is already large and rapidly increasing. We have all the machinery and equipment at the quarry necessary for operating and shipment, including large derricks worked by steam, engine, pumps, &c., and all the modern improvements for quarrying purposes. We have several dwelling-houses on the property for the superintendent and the quarry hands, workshops, offices, &c. We intend shortly to have our own vessels for transporting. Major C. P. E. Burgwyn, government engineer of the James river improvement, is officially connected with us as consulting engineer. Mr. T. O'Reilly, formerly of New York, who has had 30 years' experience in the granite business, is superintendent at the works. Preference will be given to Richmond labor in employing hands, and to the conservation of the interests and prosperity of the city of Richmond in every way possible.

FRED. N. GARROD, Prest.,
312 Stock Exchange Place.

New Mills at Livingston, Ga.

LIVINGSTON, GA., August 19, 1885.

Editor Manufacturers' Record:

I noticed in your last issue that you invite the people of the South to give the general prospects of the crops in the South. I don't think I have ever seen better prospects than those of this year. The people are all in high spirit, and many of them are making wonderful changes in business. W. G. Foster & Bro. have bought out the Thomas Flouring Mills near this place, and have been spending the summer in repairing and putting in new machinery. They have about completed the work, and the mills are doing a fine business. C. F. Stephens is putting up a new steam ginnery at Livingston; Mr. T. V. Sanford, near this place, is building a new steam ginnery, with a grist mill in connection, which will be completed soon; Mr. Drewey Vaughn contemplates erecting new saw mill near here; Flooker & Sanford have their new saw mill in operation at this place. There are several new buildings here.

F. B. THOMAS.

Sash, Door and Furniture Factory.

CALERA, ALA., August 21, 1885.

Editor Manufacturers' Record:

A sash, door and blind factory, including also the manufacture of furniture, hubs, spokes, and wagon material generally, will be built at Calera in a short time. The projectors have ample capital and will make a grand success of the enterprise. There is no better point in the South for such a factory, as timber of every kind, both hardwoods and yellow heart and curly pine, are easily obtained. Calera is growing rapidly.

G. L. G.

A New Brick Yard.

SHEFFIELD,

COLBERT CO., ALA., Aug. 19, 1885.

Editor Manufacturers' Record:

The "Iron City Brick Works," of which I am secretary and treasurer, will begin the manufacture of plain and pressed brick about the 1st prox. Maximum capacity 40,000 every 10 hours. Will mould the brick from watered clay tempered exactly the same as potters' clay. My company will use the improved sword machine, with crusher, carriers, represses, and every modern appliance for making strong and perfect brick.

C. W. BARNETT, Sec. and Treas.

To Enlarge Ice Factory.

WILMINGTON, N. C., Aug. 20, 1885.

Editor Manufacturers' Record:

It is our purpose to enlarge our ice factory this winter, but to what extent we have not yet decided.

WM. E. WORTH & CO.

Will Help to Establish Factories.

MONTGOMERY, ALA., Aug. 22, 1885.

Editor Manufacturers' Record:

The rumor that Calera Land Co. would erect an iron furnace and cotton-seed oil mill was unauthorized. We, however, stand ready to encourage and assist in the erection of any and all kinds of manufacturing enterprises at Calera.

J. R. ADAMS,
Vice-President and General Manager.

A Sash and Door Factory.

GAUDSEN, ALA., August 17, 1885.

Editor Manufacturers' Record:

I will remove to Scottsboro, Ala., September 1st. Will put up a large sash, door and blind factory. Building is 25x100 feet, 2 story, all iron. Can't say what the cost will be yet.

J. W. CARLIN.

West Point's Mills.

WEST POINT, MISS., August, 20 1885.

Editor Manufacturers' Record:

We have a cotton-seed oil mill—a large fine 2½-story brick building right at the crossing of the Mobile & Ohio and the Illinois Central (Aberdeen division); with the very best machinery. We have two grist mills and cotton gins. One a large frame building, the other a two story brick about 40x60 feet. This mill has all the latest improved machinery for grinding corn and ginning cotton. Owned by Davis & Carothers. Also a cotton compress.

L. T. CARLISLE.

A Piano Factory for Atlanta.

LELIATON, GA., August 21, 1885.

Editor Manufacturers' Record:

The Georgia Improved Piano Co. began with a view to erecting their factory here, but have decided to change the plant to Atlanta, Ga. Their factory and machinery will cost \$75,000, and they have two of the firm North at present making necessary purchases. They are having two fine instruments in course of completion at Boston, Mass., and will put them on exhibition South.

J. DELAUGHTER.

Grenada's Compress.

GRENADA, MISS., Aug. 22, 1885.

Editor Manufacturers' Record:

I have bought and moved the Jackson (Miss) Compress Company's compress to this place. It will be put in excellent shape and do good work. Rapid progress is being made in erecting compress. A bank and other developments are sure to follow.

FRANK B. NICHOLS,
Prest. and Genl. Manager
Grenada Compress Co.

An Alabama Seaport.

MOBILE, ALA., August 20, 1885.

Editor Manufacturers' Record:

The Dauphin Island Improvement Company has secured Dauphin Island, at the mouth of Mobile bay. The company is now surveying the island, and will begin making improvements with the view of making the island a seaport for the exportation of coal, iron, grain, cotton and timber; also with the view of connecting by direct rail route the Gulf of Mexico with the great trunk lines running North and West. JOHN MAHON, Sec'y Dauphin Island Improvement Co.

A Heavy Business.

CHATTANOOGA, TENN., August 21, 1885.

Editor Manufacturers' Record:

We have just completed a new warehouse—connected with our old one—which is 50x80 feet, 2 stories, and have added new machinery and improvements to our factory building. An outlay altogether of \$2,500. We have had the largest August business we ever enjoyed, and prospects very flattering. TEMPLE & SHIPP.

The Kentucky Coal Mines to be Opened by English Capital.

LOUISVILLE, KY., August 21, 1885.

Editor Manufacturers' Record:

Our arrangements are about concluded, but cannot as yet give you particulars.—Our iron and engine have arrived at Cloverport, and the track will be laid at once. The mines will be opened as soon as possible thereafter. WM. JOHNSTON.

Opening a Coal Mine in Texas.

LAMPASAS, TEXAS, August 18, 1885.

Editor Manufacturers' Record:

We have without doubt struck a very extensive coal field. The out crop promises very good, and the coal is, what found in croppings, of far better quality than any yet found west of the Mississippi, with the exception of Canyon City, Col. The work is being done as a private venture, and not having driver drill, the work of development is slow. Not able to give positive data as yet. Are pushing work as fast as can. Sinking shafts at different points. GEO. L. FRANKLIN.

Rebuilding Canning Factory.

DEER CREEK, MD., August 21, 1885.

Editor Manufacturers' Record:

We are rebuilding our canning factory now, 40x60 feet, 8 feet to square. Hope to begin operations on the 24th. S. B. SILVER & BRO.

Albany's \$18,000 Compress.

CINCINNATI, O., August 20, 1885.

Editor Manufacturers' Record:

We are putting into Albany, Ga., one of our compresses. Will be in operation about 1st of September next. Cost put up ready to run \$18,000. CAMPBELL COTTON COMPRESS CO.

A Soapstone Quarry.

MARIOTTSTVILLE, MD., August 20, 1885.

Editor Manufacturers' Record:

We are working the old Maryland Soapstone Quarry; also put up a saw mill, and sawing it into slabs, and about putting in machinery for making register borders and fire-place linings. RALSTON, WELDY & CO.

REYNOLDS, GA., August 20, 1885.

Editor Manufacturers' Record:

I am at work on a steam gin; will be ready for work by 1st September. P. E. McDANIEL.

MINING NOTES.

By BRUNER & EAMES, Salisbury, N. C.

KING'S MOUNTAIN GOLD MINING CO.

The King's Mountain Gold Mining Co. has been reorganized, with Prof. J. C. Horton as president and superintendent. He is now at the mine, near King's Mountain station, on the A. & C. Air Line Railroad, and is engaged in working some of the surface ores. The main shaft is over 300 feet deep and has a fine vein of quartz in limestone, sometimes having a width of 15 feet. The ore is of a grade that will pay well if the proper mode of treatment and management is used. At present they employ about 25 or 30 hands. They are figuring on a large steam pump of sufficient capacity to drain the main shaft. They have a 40-stamp mill, or, we should say, the remains of one, as parts of it have been taken from the mine during the late litigation, all of which will be replaced when it is deemed expedient. The mine produced \$80,000 one year when in full operation. John Mackey, the bonanza king, was at one time a stockholder in this property.

THE HIDDENITE MINE.

Prof. W. E. Hidden, of Newark, N. J., is engaged in reopening his renowned "Hiddenite Mine," near Stony Point, in Alexander county. This mine is the only known locality in the world producing the precious gem "Hiddenite."

SHUFORD GOLD MINE.

The Shuford Gold Mine, situated in Catawba county, is owned by W. A. Sweet and others, of Syracuse, N. Y. The superintendent was in Salisbury not long ago obtaining estimates from Bruner & Eames on the sinking of a 300-foot shaft. If the company conclude to do this they will require large hoisting and pumping machinery. At present they have a large hydraulic outfit, with a Frazer & Chalmers' 5-stamp mill. The address is "Hyser, superintendent of Shuford Gold Mining Co., Catawba P. O., N. C."

GOLD HILL MINE.

Gold Hill, Rowan county, consists of a mine 750 feet deep, with 20-stamp mill, saw mill and other machinery; also 1,140 acres land, the value of which is \$250,000. Employ 10 hands at present.

HOOVER HILL GOLD MINE.

Hoover Hill Gold Mine, Randolph county, (Wm. Freshville, superintendent,) is 250 feet deep. They own about 300 acres of land, a 20-stamp mill, with pumping and hoisting machinery. They have produced since 1883 over \$100,000 in gold, and are now on a better paying basis than ever, with a year's ore in sight. Employ 80 hands.

RUSSELL GOLD MINE.

The Russell Gold Mining Co. own the mine of same name in Montgomery county, Eldorado P. O. They have at least 200,000 tons of low grade ore in sight, with about 400 acres of land, valued at \$200,000. Employ 50 hands.

The Gold Hill, Hoover Hill and Russell are all owned by English capitalists.

KING'S MOUNTAIN TIN MINE.

The King's Mountain Tin Mine, owned by Dr. Dabny, State chemist, Raleigh; Judge Avery, of Morgantown, and Capt. Bell, of King's Mountain, will shortly resume work, when it is expected they will ship the ore to England, as they have received an order for a lot of it.

CAROLINA IRON MINING CO.

Mr. W. A. Mauney, a merchant of King's Mountain, writes as follows: "The superintendent of Carolina Iron Mining Co. was here a few days ago, and they expect soon to commence shipping their fine iron ore North. They have 200 tons or more raised ready for shipment." They have 500 tons of copper ore on the dump at the Elk Knob

Copper Mine, and a smelter nearly completed. For some reason they are idle.

HAILE GOLD MINE.

The Haile Gold Mine, P. O., Haile's Gold Mine, Lancaster county, S. C., employs about 100 hands. The mine is in a very prosperous condition and has been for the past four years, producing at one time as high as \$10,000 per month. Mr. E. Gybbon Pillsbury is the superintendent.

Mr. W. H. Clarke, of 340 Shawmut avenue, Boston, Mass., is at the Central Hotel, in Charlotte, N. C. He was formerly connected with the Rudisill Mine at that place, paying \$20,000 cash for an interest. He is looking about the State with a view to finding good mining property, on which he proposes to put up mills.

PHOSPHATES.—The phosphates of South Carolina were long known to geologists, but their commercial value was not recognized till 1867; since then immense quantities have been raised. The deposit is found in beds of rough masses or nodules, associated with fossil bones and teeth in the creeks and rivers, and on the low lands running parallel to and from 10 to 50 miles from the coast. The nodules contain on analysis from 55 to 61 per cent. of tricalcic phosphate, and 5 to 11 per cent. of carbonate of lime, with some other unimportant constituents. The phosphates are used for the manufacture of artificial fertilizers, of which they form the basis, and are largely consumed at home and abroad. The phosphate industry of South Carolina has already assumed astonishing proportions, but it is nevertheless still in its infancy. There are at present in operation in the State 14 land mining companies, 11 river mining companies, and 11 fertilizer companies. There have been mined and shipped (1868-84) 2,699,000 tons of phosphate rock, equivalent to about \$16,000,000; there have been manufactured (1871-84) 2,000,000 tons of fertilizers, equivalent to about \$34,000,000, giving a total of \$50,000,000, which has been brought into the State by the phosphate industry in the last 17 years. Of this amount the State has received as revenue \$1,200,000, which was paid as royalty, besides the heavy taxes levied on the products of the land companies, and fertilizer manufacturers. The production of phosphates for 1884 was 409,000 tons of rock, and 236,884 tons of fertilizers.

AMONG the recent improvements worthy of note in the South is the establishment of a winter resort at Interlachen, Putnam county, Florida. It is situated on the Florida Southern Railroad, and although it is hardly three years since the enterprise was started by cutting the first tree of the forest, it is now a lively town, and boasts of four general stores; one drug store, a saw mill, a planing mill, a cotton gin and a select society of Northern citizens who aim to make it an economical resort, free from dissipation and exactions of fashion. There are two commodious hotels, and several boarding houses, and considerable sums are already subscribed toward the establishment of an academy where families will find educational facilities for their children corresponding to the Northern schools. The enterprise is under the management of the Interlachen Winter Resort Co., Springfield, Ohio.

THE Standard Silk Co. are to erect a mill at Phillipsburg, N. J., 256 feet long and 54 feet 8 inches wide, three stories high and basement; also a boiler-house and chimney. Plans have been made by Messrs. Lockwood, Greene & Co., mill engineers, Providence, R. I.

THE Curtis Regulator Co., of Boston, Mass., has just finished a large Pressure Regulator for the Water Works of the city of Moscow, Russia.

Going to Advertise.

In spite of the not any too favorable state of the watch trade in Switzerland, some new factories have recently been established—one in Breleux, another in Tramelan, and a third in the Canton of Lucerne. The Swiss are waking up to the importance of advertising. A convention recently held at Chaux de Fonds, for the purpose of discussing this question principally, decided that advertising, and especially advertising in English and American papers, was a necessary and indispensable requisite to the watch trade of Switzerland. It was also "resolved" that the American factories owed the largest proportion of their success to their advertising, as the Swiss manufacturers could plainly see by tracing effects to their causes.—*Jewelers' Journal.*

THE first number of the new Southern magazine, "Dixie," has been received. It contains a poem—"The Land of Dixie"—by Mrs. Elizabeth Winslow Allderice; an article on "The Natural Resources of Georgia," by Col. I. W. Avery; "The Great Tariff Issue," by Saml. Noble; "Bits of Virginia Scenery," illustrated, by Clement Mason; "The Forest Wealth of Dixie"—first paper—by Charles H. Wells, and other matter of interest. Its special departments are: "Editor's Department," "Dixie's Resources," "Dixie's Development," "Current Notes," "Humor—Illustrated and Typed." "Dixie" is conducted by the Dixie Company, of Atlanta, under the editorial management of Mr. Charles H. Wells.

There is need of a Southern magazine of high order, and it is to be hoped that "Dixie" may be able to meet this want. The publishers should, however, before issuing the next number, discard the present cover, the most prominent features of which are a Florida swamp scene, a negro and a mule.

JOSEPH F. JOHNSTON, Wm. A. Walker, Jr., E. W. Rucker, H. M. Caldwell, Ed. Linn, A. B. Johnston, Fred Sloss, E. M. Tutwiler and others, of Birmingham, are organizing a stock company to open up a stock farm about five miles from that city. They have selected a charming location containing 1,600 acres for which they are to pay \$25.00 per acre. The farm is to be stocked with horses, cattle, hogs and sheep. Capital stock, \$75,000.

BUDDEN & SON, lithographers, Atlanta, Ga., have purchased a new Hoe press, a large number of new stones, etc., and are moving their establishment from the corner of Loyd and Alabama streets to a more substantial building on Wall street. These additions to their already large stock will cost \$7,000.

MR. A. H. KIRKLAND, of Jackson, Miss., writes us: "I have extensive plow and implement works here. Have put in new boiler this year and am now putting in other improved wood-working machinery. I want to move to Florida and will sell my place and business. No better business or locality can be found for any one wishing to invest in manufacturing."

THE DUNNELL Manufacturing Co., of Pawtucket, R. I., are to erect a building 272 feet long by 64 feet wide, two stories high and basement. Plans of building and arrangement of power and machinery are being made by Messrs. Lockwood, Greene & Co., mill engineers, Providence, R. I.

ADVERTISERS wishing to reach manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the BALTIMORE MANUFACTURERS' RECORD. We are always prepared to furnish proof of our claims as to circulation.

The Stiles Central-Swing Press.

The accompanying engravings show some recent improvements in presses for sheet metal work, made by the Stiles & Parker Press Co., Middletown, Conn.

tension is changed. In this press the movement is from a center coincident with the axis of the shaft, and hence no matter to what angle the bed is swung, the belt tension is always constant. This of itself, will be recognized as an important feature.

shaft carrying a worm; this worm engages a segment of a worm wheel whose center is in the axis of shaft. Turning the handle swings the press in or out as desired, and as the segment will not drive the worm, it will remain wherever placed without fastening. The swinging being so simple a matter, it naturally follows that in use, the adjustment will be the most advantageous one for the work being done, and that this simple adjustment will greatly facilitate work where changes must be often made.

In any adjustment that may be made, the treadle and stop motion are not disturbed, but are always in proper connection. The form of the frame, it will also be noticed, is such that there are no legs or projecting parts in the way of the operator with the bed swung to any angle. The shelf, for holding a box to receive the work as it drops from the die, is adjustable to any height desired.

It will be understood that the strains due to working do not come upon the frame or supporting part of the press. In the engravings the circle next outside the shaft is the boundary of the part of the bed, or press proper, which extends through the frame,

and in which the shaft revolves; all strains are thus brought upon this part of the press, instead of any thrust being transferred to the frame, which simply serves as a support for the working parts.

The adjustment used in this press admits of the pitman filling the whole space between the bearings, thereby securing to itself a long bearing and adding strength and stiffness to the press.

The press when set on the incline, as represented in Fig. 1, is intended for work cut and formed in one operation, and facilitates the removal of the work from the die; when set level, as shown by Fig. 2, it is adapted for all work usually done on presses.

"How to Raise the Wind."

By writing to "The Atlanta Wind Engine Co.," Atlanta, Ga., you will find out. This concern manufactures wind engines and pumps, railroad and reservoir tanks, etc. Their wind-mills are common throughout Georgia, Alabama, North and South Carolina, and their products are beginning to be known in other of the Southern States.

The old-fashioned well is giving way to the wind-mill water-works rapidly, and will soon be "among the things that were."

No farm, residence, hotel or institution of any kind need be without a plentiful supply of water any longer.

Then this company make geared wind-mills for driving machinery, pumps, etc.; also make the "Eclipse" grinder, which grinds corn, etc., rapidly. To these geared wind-mills they have wood-saws, corn-shell-ers, which can be attached, and thus much accomplished with little labor.

Write for circulars, plans, estimates to Atlanta Wind Engine Co., Atlanta, Ga.

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THE MARKETS.

OFFICE MANUFACTURERS' RECORD, 1
BALTIMORE, August 25, 1885.

The signs of improvement previously reported continue, and in some lines of trade there is considerable activity, with prospects better than for several years. The enormous crops produced in the South have already imparted a better feeling in business circles, and Southern merchants are preparing for a large fall trade. As stated elsewhere, the United States Agricultural Department estimates the probable yield of corn in the South at 65,000,000 bushels more than last year, while all other crops, excepting wheat, are also much better than in 1884.

The steel rail manufacturers have advanced the price of rails to about \$29@30, and it is thought that there will be no decline from these figures.

Some of the bar mills report more demand than for a year past, and are not filling orders as rapidly as heretofore, owing to the greater amount of work on hand.

In the manufactured iron market there is some improvement in the demand, orders being more numerous than heretofore. We quote as before, viz:

Ref. Bar Iron, 1 to 6x3/4 to 1.....	1 1/2 @ 1.8c
" " 1 to 4 1/2x1 1/2 to 1.....	1 1/2 @ 1.8c
" " 3/4 to 1, round and.....	1 1/2 @ 1.8c
square.....	1 1/2 @ 1.8c
Hoop Iron, 1 1/2 wide and upward.....	2 1/2 @ 2 1/2 c
Band Iron, from 1 1/2 to 6 in. wide.....	2 1/2 @ 2 1/2 c
Horseshoe Iron.....	2 1/2 @ 3 c
Norway Nail Rods.....	3 @ 5 1/2 c
Black Diamond Cast Steel.....	9 @ 10 c
Machinery Steel.....	3 1/2 @ 4 1/2 c
Spring Steel.....	3 1/2 @ 4 c
Common Horse Nails.....	8 @ 9 c
Railroad Spikes, 5 1/2x9-16.....	2 @ 2 1/2 c
Perkins Horse Nails.....	23-7 1/2 c
Mule Nails.....	24-7 1/2 c

The local market shows no change in pig iron, the demand being only moderate. In the West there is an increased demand reported. We quote as follows, viz:

Baltimore Charcoal Wheel Iron (all Baltimore ore).....	\$18 00@20 00
Virginia C. B. Charcoal Wheel Iron.....	\$18 00@20 00
Anthracite, No. 1.....	\$19 00@20 00
" " 2.....	\$17 00@18 00
" " 3.....	\$15 00@16 00
" Mottled and White.....	\$13 00@14 00

HARDWARE.

The hardware market remains practically unchanged, and while prices are as before, there is reported a firmer tendency. Reports from the South continue favorable for an active fall and winter trade. Nails continue in limited demand with prices as before \$2.00@2.15.

Philadelphia Iron Market.

PHILADELPHIA, August 24, 1885.

The transactions during the past week that are deserving of notice have been confined to pipe iron, bridge iron, steel rails. Outside of these articles, there is nothing of importance to note. No improvement in price has taken place anywhere excepting in steel rails. The cause of this improvement is not easy to ascertain, when we consider that this year the railway mileage is one third less than last year. Prices have nominally advanced to \$28 to \$30. Buyers do not take hold of these figures. Usually in the latter part of August and the early part of September large orders are placed. There are inquiries in the market now for upwards of 100,000 tons. It is believed that large lots are taken at or very little above the prices formerly prevailing, viz: \$26.50 to \$27. The current of the iron trade sentiment is that the advance is not legitimate. The expected restriction is the basis of the improvement. The companies can retract their resolution to restrict as readily as they made it.

The structural iron makers are doing a big business. There is not a particle of change in prices. The Baltimore and Ohio Company is in the market for a good deal of material, and it is understood that they have in contemplation the putting up of a good deal of bridge work. The Troy iron company are in the market for upwards of three-quarters of a million dollars worth of material. Virginia

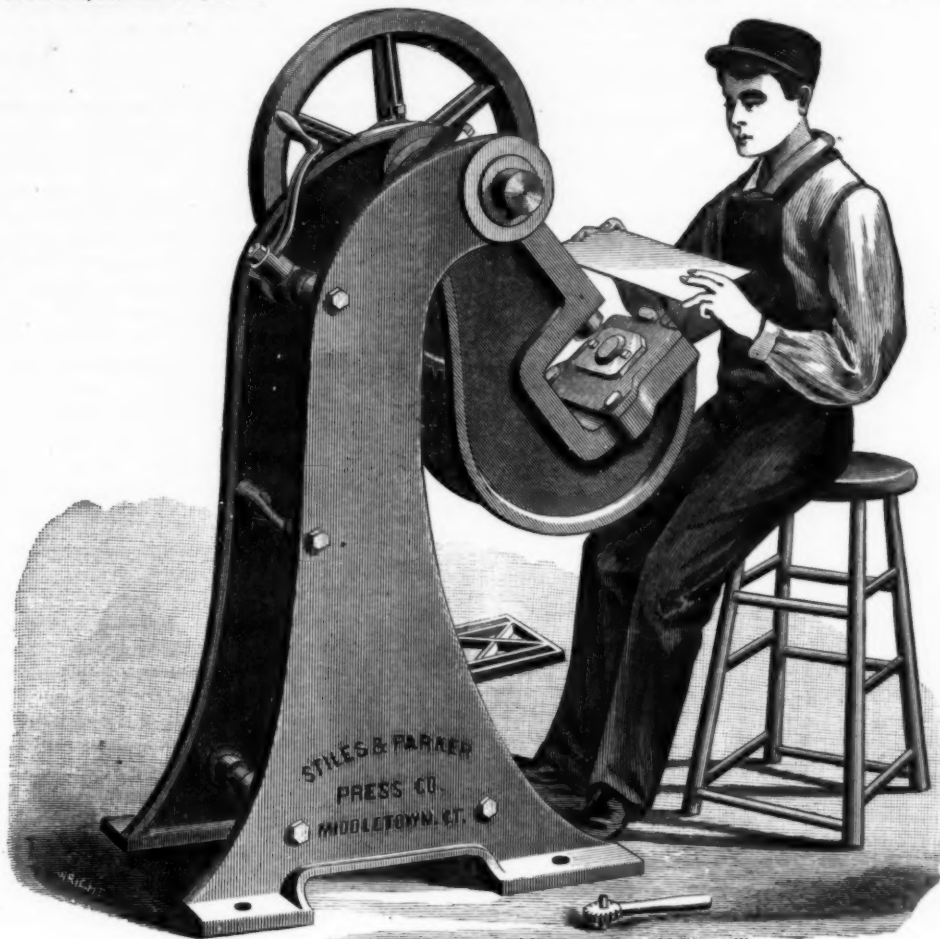


FIGURE 1—ON THE INCLINE.

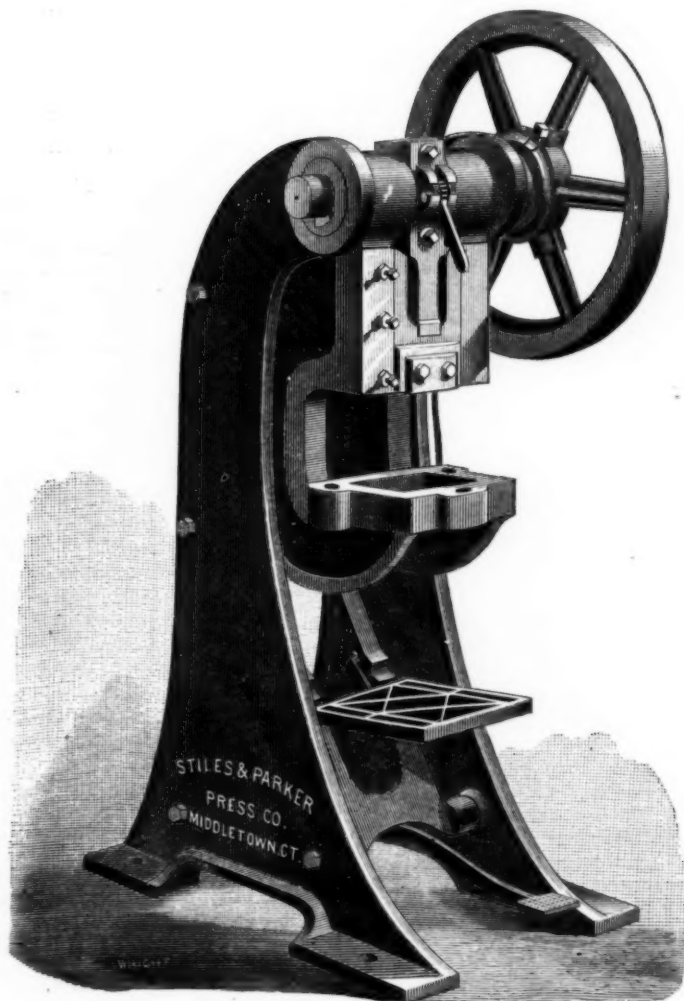


FIGURE 2—SET LEVEL.

In adjustable incline presses, as usually constructed, the movement is from a center somewhere below the axis of the driving shaft, so that the shaft moving in the arc of a circle described from that center, the belt

The improved means of adjustment employed in this press enables it to be done with great ease and dispatch, a small boy being able to swing the largest press made. The handle at the back, in Fig. 1, is connected to a

iron is meeting with good sale in this market. Alabama irons are being offered but outside of pipe iron requirements they do not meet with much recognition. A good deal of attention is being called to the facilities for cheap iron making in the South and Pennsylvania; iron makers are not the last in the race to avail themselves of facilities of this character. Pennsylvania forge irons are selling at \$15 to \$15.50; foundry irons at \$16 to \$18 for standards. All special irons are well sold up. The market is in a good condition for a little advance, but any advance could be easily spoiled by the blowing in of a few hungry furnaces. Nail makers are doing a better business but do not seem to be able to command better prices. Prices run from \$2 to \$2.20 for iron and steel, according to quantity ordered. The bar iron mills are making but little headway, although business is more encouraging than it was during July. Prices are just the same, \$1.50 to \$1.80, though for common brands \$1.40 is readily taken. The half dozen steel works under erection in this State are being pushed forward.

Cincinnati Iron Market Report

Specially reported by ROGERS, BROWN & Co., Pig Iron Commission.
CINCINNATI, Aug. 24, 1885.

The frequent heavy sales of pig iron noted in these reports during the past three or four weeks foreshadowed a change in the market. Such change has come in the past week. Practically for the first time since February sellers are making the prices. On the 18th instant, the important group of five Southern coke furnaces, controlled in Nashville, advanced prices on all grades 25 to 50 cents per ton from minimum figures that had been accepted. Leading Alabama furnaces have done the same thing. This is without any understanding or concert of action but results solely from too heavy selling at the figures of three weeks ago. It was not thought that sales would be numerous at the slightly advanced prices, but they have steadily increased. Ohio furnaces are feeling the same influences. Stocks at all furnaces tributary to Cincinnati have been rapidly worked down since August 1st, and are now, excepting at some charcoal furnaces, barely sufficient to afford an assortment of grades. The situation is such that both buyers and sellers find interest in watching it closely. Several important car contracts, either recently let or about to be let, have added considerably to current inquiry. We quote for cash f. o. b. cars at Cincinnati:

HOT-BLAST FOUNDRY.	
Ohio and Southern Strong Coke No. 1.	\$16 00@17 00
" " " " " " " " " " " "	No. 2. 15 00@16 00
" " " " " " " " " " " "	No. 3. 14 00@15 00
Ohio Soft Stonecoal, " " " " " "	No. 1. 16 50@17 00
" " " " " " " " " " " "	No. 2. 16 00@—
Mahoning and Shenango Valley Coke, No. 1.	16 50@17 50
CHARCOAL IRON.	
Hanging Rock, No. 1.	\$19 00@20 00
" " " " " " " " " " " "	No. 2. 17 00@19 00
Tennessee and Alabama, No. 1.	17 50@18 50
" " " " " " " " " " " "	No. 2. 16 50@17 50
FORGE.	
Strong Neutral Coke.	\$13 50@—
Mottled " " " " " " " " " " " "	12 75@—
Cold Short.	13 00@—
CAR WHEEL AND MALLEABLE.	
Southern Car-Wheel Iron.	22 00@24 00
Hanging Rock C. B.	25 00@27 00
" " " " " " " " " " " "	20 00@23 00
Lake Superior Malleable.	22 00@25 00

Specially reported by E. L. HARPER & Co.

CINCINNATI, Aug. 24, 1885.

We are glad to note that our last report is being substantiated in a great measure by the trade generally. Quite a number of good orders have been placed at ruling figures and for immediate delivery. The furnaces generally are becoming more firm and not disposed to sell for delivery beyond September for present prices. We learn that further advances have been realized on iron merchandise. What there is in the future no one knows to a certainty, but the indications are quite encouraging. This feeling exists in all branches of trade, thereby establishing the fact that confidence is being restored.

With the continued good feeling and increasing demand there is no doubt but what better prices will be realized soon. We quote as prices current cash f. o. b. cars or wharf here:

FOUNDRY.	Cash.
Hanging Rock Charcoal, No. 1.	\$19 00@20 00
" " " " " " " " " " " "	17 50@18 50
Southern Charcoal " " " " " "	17 00@17 50
" " " " " " " " " " " "	16 00@16 50
Strong Neutral Coke, " " " " " "	15 50@16 00
" " " " " " " " " " " "	14 00@15 00
American Scotch, " " " " " "	15 50@16 00
GREY FORGE.	
Neutral Coke.	13 00@13 50
Cold Short.	13 00@13 50
CAR WHEEL AND MALLEABLE.	
Hanging Rock, strictly cold blast.	25 00@25 50
Hanging Rock, strictly warm blast.	21 00@21 50
"Cranberry," N. Carolina Warm Blast.	22 25@22 75
Amherst and Virginia Warm Blast.	19 00@20 00
Lake Superior Charcoal, all grades.	19 00@20 00

Louisville Iron Market.

Specially reported by W. B. BELKNAP & Co., Nails, Wire, Iron, Hardware, Carriage and Wagon Goods.
LOUISVILLE, KY., Aug. 24, 1885.

The general market for the past week has manifested an increased activity, which is gratifying to report. There is a good demand for all lines of goods except those that are notably out of season, and such as are controlled by combinations. The railroad interests hereabouts are improving daily, receipts are large and rates well maintained.

Bar Iron.—This sluggish commodity has at last awakened in response to the good demand, and the metallic ring of bars and bales may be heard in the warehouses, and at the shops, and on our principal thoroughfares constantly.

Hoops are quiet, as this is not the distilling season.

Sheet is strong both in heavy and light gauges; the demand for heavy gauges indicates a good demand of construction, and confirms the reports that we hear in other ways.

Steel.—Cast steel is selling in fair quantities. Agricultural steels are in request, some large contracts having been placed at figures not far from last year.

Nails.—The demand for nails has been more active than at any time since the January boom. Trade on these has come "all in a heap." Steel nails are especially scarce and commanding full price.

Wire.—The fall trade on barb wire is apparently setting in full power, and it promises to be lively. There is a great deal of fencing to be done throughout this territory this coming season, and farmers are only beginning to prepare for it.

Metals.—Pig lead and bar lead are selling in a moderate way at advanced prices. Babbit metal and solder are jobbing about as usual, irrespective of advance. Fine crops throughout the South are doing much to stimulate business. A great number of buildings are being put up in our city, and the Exposition, now in full blast, is attracting visitors. Altogether, both city and country are putting on signs of prosperity, and ere long the patient, long-suffering hardware and iron men may hope to share it.

Specially reported by Geo. H. HULL & Co., Commission Merchants for the sale of Hot and Cold Blast Pig Iron.
LOUISVILLE, KY., Aug. 24, 1885.

The market has been attended with very slight changes during the past week in price. The tone, however, is firm, and there is considerable disposition on the part of the buyers to book orders several months ahead. Furnaces are firmer than heretofore. We quote for cash in round lots as below:

PIG IRON.	
Southern Coke, No. 1 Foundry.	\$16 00@17 00
" " " " " " " " " " " "	15 00@15 75
" " " " " " " " " " " "	13 50@14 25
Hanging Rock Coke, No. 1 Foundry.	15 50@16 00
" " " " " " " " " " " "	20 00@21 00
Southern Charcoal, No. 1 Foundry.	17 50@18 50
Silver Gray, different grades.	14 00@15 00
Southern Coke, No. 1 Mill, Neutral.	13 00@13 50
" " " " " " " " " " " "	12 50@13 00
" " " " " " " " " " " "	12 75@13 00
Southern Charcoal, No. 1 Mill.	16 00@17 00
White and Mottled, different grades.	11 00@12 00
Southern Car Wheel, standard brands.	23 00@24 00
" " " " " " " " " " " "	18 00@20 00
" " " " " " " " " " " "	23 00@24 00
Hanging Rock Cold Blast.	23 00@24 00
" " " " " " " " " " " "	18 00@20 00

St. Louis Iron Market.

Specially reported by W. H. SHIELDS, Pig Iron and Iron Ore, No. 318 Olive Street.
ST. LOUIS, Aug. 24, 1885.

While prices for standard brands of pig iron show no decline, the general demand is not good. Ohio iron, of strange brands, are offering at ruinously low figures, probably to gain a standing. Some undesirable grades of Southern irons have been unloaded on outsiders desiring to speculate, upon which the purchasers could not now realize within three dollars of the price paid. Upon the whole the condition of the market remains practically unchanged. We quote:

HOT-BLAST CHARCOAL.	
Missouri.	\$14 00@16 50
Southern.	17 00@18 50
Ohio.	—@—
COKE AND COAL.	
Missouri.	14 00@16 00
Southern.	15 00@17 00
American Scotch.	16 00@19 00
MILL IRONS.	
Missouri.	14 00@14 50
Southern.	13 00@14 00
CAR-WHEEL AND MALLEABLE IRON.	
Southern.	20 00@24 00
Lake Superior.	20 00@23 00
MISCELLANEOUS.	
Old Rails.	15 00@17 00
Old Wheels.	14 00@15 00
Connellsville Coke, East St. Louis.	—@5 30
Wrought Scrap.	—@—
Cast Scrap.	—@—
Iron, per.	

Chattanooga Iron Market.

Specially reported by LOWE & TUCKER, Brokers and Commission.
CHATTANOOGA, TENN., Aug. 24, 1885.

We have nothing particular to note in business circles. The weather continues very favorable for all growing crops, which gives further promises as the fall approaches. Some estimates place the cotton crop at 41½ million bales, which will be unprecedented in the history of the South. The demand for iron continues to be good, especially for the standard foundry grades.

Prices are firm, but without change, viz:	
No. 1 Foundry.	\$14 50 @15 50
No. 2 Foundry.	13 50 @14 50
American Scotch.	13 50 @14 00
Gray Forge.	12 50 @13 00
Car-Wheel Iron.	22 00 @24 00
Ores, Red and Brown.	1 50 @ 2 25
Furnace Coke.	2 00 @ 2 50
Nails, car-load lots, 30 days.	— @ 2 25
Bar iron, per 100 lb.	— @ 1 75
Old Rails.	— @16 00
Old Wheels.	— @13 50
Wrought Scrap.	— @—
" " " " " " " " " " " "	— @—
Cotton Tie Clippings.	— @—
Cast Scrap.	— @—
Rail-Road Splices.	— @ 1 75
Light Rails.	2 00 @—
Barb wire—Cambria link.	5 @ 5½
Barbed wire—four point galvanized.	6 @—

Carriage and Wagon Material.

AXLES.	
Half Patent, solid collar.	dis 60 %
Common.	rate 4
Concord.	8½
BODY LOOP ENDS.	
Plain, set.	100
Bolts, Eagle.	75
CLIPS.	
Superior Axle.	dis 60 %
Norway.	" 40 %
Saddle.	doz set \$1 50
FINISHED CLIP KING BOLTS.	
Flanged, ½ doz.	Nos. 1 & 2 3 50
" " " " " " " " " " " "	3 00 3 50
DASHES.	
Leather.	dis 10 %
ENAMELED CLOTHS.	
Muslin, ½ yard, 5-4.	18
Drill, " " " " " " " " " " " "	24
Duck, " " " " " " " " " " " "	29
Tan Back, " " " " " " " " " " " "	32
FELLOE PLATES.	
Per lb.	8
FIFTH WHEELS.	
Derby, ¾, ½ doz.	\$7 75
" " " " " " " " " " " "	8 75
Cincinnati, ¾, ½ doz.	6 00
" " " " " " " " " " " "	7 00
RUBBER DUCK AND DRILL—35 % off list.	
Seat, 1½ x 2x36, ½ pair.	90
Buggy, 1½ in. and larger.	8
" " " " " " " " " " " "	9
Oil-tempered springs sc. advance from above.	—
MALLEABLE CASTINGS.	
Rate.	8
Core.	12
SHAFT AND FOLE COUPLINGS.	
No. 1 Top, ½ ft.	28
" " " " " " " " " " " "	23
" " " " " " " " " " " "	19
" " " " " " " " " " " "	10 @10½
Fancy Morocco, ½ ft.	26
Bow, ½ ft.	20 @23
Collar, " " " " " " " " " " " "	24
Harness, ½ lb.	40

STEP PADS.	
Per doz. pair.	\$2 25@7 50
Spokes, No. 1, 1 to 1½.	\$2 25 @ set.
" " " " " " " " " " " "	2 50 " "
" " " " " " " " " " " "	3 50 " "
Wheels, Sarven Patent.	\$6 50 to 14 00
HICKORY FELLOES.	
X.	1 ½ 1 ½ 1 ½ 1 ½
XX.	1 25 1 25 1 35 1 60 2 00 @ set.
" " " " " " " " " " " "	3 00 3 25 3 50 3 75 4 25
HICKORY SPOKES.	
No. 1.	1 ½ 1 ½ 1 ½ 1 ½
XX.	2 25 2 25 2 25 2 50 2 75 @ set.
" " " " " " " " " " " "	3 50 3 50 3 50 3 50 3 75
HUBS.	

W. R. S under date of August 15 writes: "I noticed in your issue of this morning an article on the subject of Boiler Construction, and it reminds me of a test lately made of the Root Boiler at the Tyson Chrome Works. This boiler will be worked under a regular steam pressure of 250 pounds. It was tested up to 500 pounds hydraulic pressure. It is to run a pair of pneumatic pulverizers, which require high—hot and dry—steam. This pulverizer is in itself very remarkable, and merits your attention. It will pulverize anything from iron filings to the hardest stone. The Root Boiler, as now made and sold, is a 'thing of beauty,' and will be to all steam users 'a joy forever.' Go and see it."

WE notice that the Baltimore MANUFACTURERS' RECORD is largely quoted all over the country as the leading trade paper of the South. It is doing an immense work in behalf of the Southern States, and that work is bound to tell in the near future.—Commercial, Chattanooga, Tenn.

List of Patents

The following Patents were granted to citizens of the Southern States, bearing date Aug. 18, 1885. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Abercrombie, T. H., Tumbling Shoals, S. C.	Churn-dasher.	324,511
Applewhite, D. T., Clayton, Texas.	Cotton, corn and pea planter.	324,514
Bond, N. O., Fairfax C. H., Va.	Door-check.	324,452
Brown, F. H., Fort Worth, Texas.	Magneto-electric telegraphy.	324,746
Buatt, S. P., Bastrop, La.	Gold and other metallic amalgam.	324,650
Carskadon, T. R., Keyser, W. Va.	Portable building.	324,456
Clark, J. W., Hermannville, Miss.	Seed-planter.	324,458
Coalter, J. A., Wolf Creek, W. Va.	Bee-hive.	324,657
Craig, A. J., Hickory, Miss.	Plow.	324,660
Dick, Geo., Baltimore, Md.	Piston-packing.	324,754
Fasnacht, L. U., New Orleans, La.	Machine for treating ramie and sugar-cane.	324,674
Goodwin, G. W., Blair, S. C.	Distributor and planter.	324,468
Grathwohl, Fritz, Covington, Ky.	Malt-drier.	324,469
Hanbery, T. G., and J. D. Wall, Newstead, Ky.	Harness attachment.	324,684
Hess, E. B., Louisville, Ky.	Electro-magnetic car-brake.	324,470
Huff, M. S., Sutton, W. Va.	Rotary engine.	324,698
Johnson, Evan, Elizabethtown, N. C.	Cultivator.	324,386
Jones, Allen, San Marcos, Tex.	Self-cleaning plow.	324,559
Mergenthaler, Ottmar, Baltimore, Md.	Shaft-bearing.	324,400
Metcalfe, C. W., Hopkinsville, Ky.	Saw-mill set-works.	324,576
Monday, R. O., Dallas, Tex.	Cloth-cutting apparatus.	324,404
Park, J. R., La Vergne, Tenn.	Railway signal.	324,411
Pinkham, D. D., Longview, Tex.	Valve-gear.	324,784
Price, G. W., Baltimore, Md.	Engine.	324,592
Price, G. W., Baltimore, Md.	Cut-off valve for engines.	324,593
Seldner, J. J., Baltimore, Md.	Drive-chain.	324,734
Williams, H. L., Lind Grove, La.	Blotter.	324,628

PATENT LAW. TRADE MARK LAW.

PAUL BAKEWELL,
Attorney at Law,

417 OLIVE STREET, ST. LOUIS, MO.
REFERENCES: Branch, Crookes & Co., Liggett & Myers Tobacco Co., Excelsior Manufacturing Co., St. Louis.

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Wellsburg's Water Works.

WELLSBURG, W. VA., August 24, 1885.
Editor Manufacturers' Record:
 Our town council has approved the plans and specifications for a water works for this town, prepared by B. W. Peterson, C. E., of Wheeling, W. Va. The entire works will cost \$25,000. Masonry reservoir, capacity 200,000 gallons. An election will be held August 29 to decide whether or not council shall issue the bonds of the town for \$25,000, the sum needed to accomplish the work.
 D. McCLELLAND.

DENTON, MD., August 24, 1885.
Editor Manufacturers' Record:
 I am building a saw and grist mill, 80-horse power; hope to be in operation about the first of October.
 F. W. REDDEN.

A Tobacco Factory.

ASHEVILLE, N. C., August 24, 1885.
Editor Manufacturers' Record:
 We are having put up a large brick factory for handling bright leaf tobacco.
 B. M. PINSON.

A Gin and Mill.

GREENWOOD, S. C., August 19, 1885.
Editor Manufacturers' Record:
 I have just put up 2 60-saw gins with power press, and a mill to grind cotton seed for fertilizers, with bolting machine to separate hulls from the meal for feed. The cost of machinery and house will be about \$3,000.
 J. H. OLDHAM.

To Build a Turnpike.

DANVILLE, VA., August 22, 1885.
Editor Manufacturers' Record:
 We will in a few days open for bids a contract for 2,800 feet of Macadamized turnpike; plans and specifications can be had by applying to the writer or other of the committee as will be advertised.
 E. H. MILLER.

THERE are few Southern cities whose progress has been more rapid than that of Knoxville, Tenn. Twenty years ago Knoxville imported coal by wagons; to-day she furnishes a quarter of a million tons for export. Twenty years ago but one iron mill south of Richmond; to-day Knoxville exports well on to a quarter of a million dollars in iron and nails; twenty years ago and zinc spelter to make a gun cap was imported; to-day Knoxville exports a million and a half pounds; twenty years ago Knoxville bought marble slabs in Vermont; to-day Knoxville exports well on to half a million dollars' worth; twenty years ago we bought walnut tables in New York; to-day Knoxville exports twenty million feet of walnut lumber; twenty years ago Knoxville sold a quarter million of dry goods, groceries, &c.; to-day Knoxville sells perhaps four millions; twenty years ago one hardware store, 25x100, sold the hardware; to-day Knoxville uses a million in hardware alone; twenty years ago Knoxville had a small clothing store, to-day one clothing house will likely pass half a million.—Ex.

Important.

Passengers arriving in the city of New York via Grand Central Depot, save \$3 carriage hire and transfer of baggage, by stopping at the Grand Union Hotel, opposite said depot. Passengers arriving by West Shore Rail Road, via Weehawken Ferry, by taking the 42d street horse cars at Ferry entrance, reach Grand Union Hotel in ten minutes for 5 cents, and save \$3 carriage hire. Passengers arriving at Pennsylvania Depot, on reaching New York side, can take 6th Avenue Elevated Railroad at Cortlandt

Street Station, and reach 42d Street Station, two blocks from Grand Union Hotel, in 20 minutes, for 10 cents, thus saving \$3 carriage hire. 600 elegant rooms, \$1 and upwards per day. European plan. Elevators, restaurant, cafe, lunch and wine rooms supplied with the best. Prices moderate. Families can live better for less money at the Grand Union than at any other strictly first-class hotel in the city. Guests' baggage delivered to and from Grand Central Depot, free.

1,600-ACRE FARM FOR SALE.

This farm is situated on the San Marcos River, in Caldwell County, Texas, and just one mile from Luling, a town of 3,000 inhabitants, on the G. H. & S. A. Railway, a through line daily from Galveston to San Francisco, California. It has a mile frontage on the San Marcos, a beautiful, bold and clear stream, abounding in fish of finest quality. There are 600 acres in cultivation, yielding from one to one and a half bales of cotton to the acre, and from 40 to 50 bushels of corn, or 80 bushels of oats to the acre. The residue is under good wire fence and is heavily timbered with post oak and well supplied with unfailing stock water. There are five small tenant houses upon the arable land with pens, cribs, &c. This is one of the finest farms in West Texas, and can be easily divided into smaller farms with pasturage for each. Price \$20,000—one-half cash and balance on easy time.

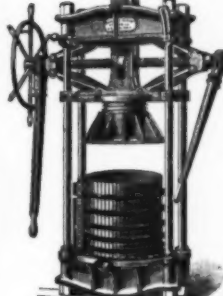
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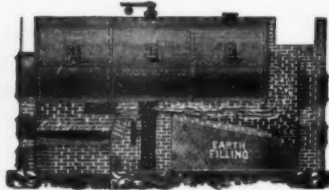
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Graniteville Mfg. Co., Graniteville, S. C.
Charleston Bagging Co., Charleston, S. C.
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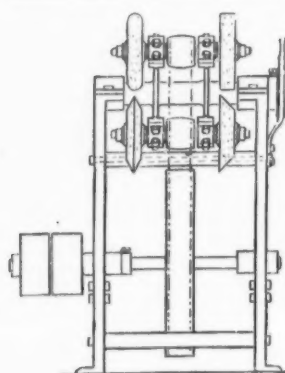


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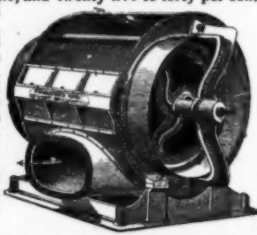
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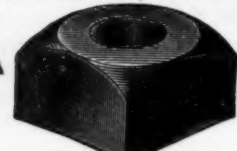
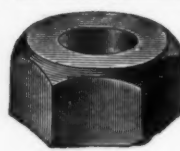
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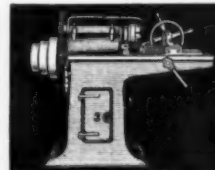
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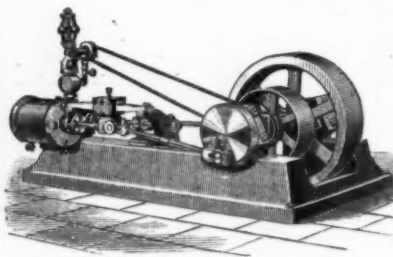
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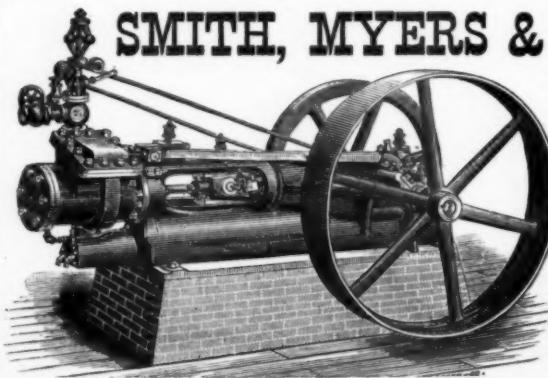
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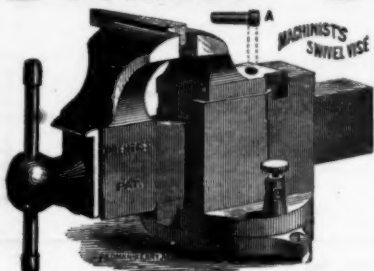
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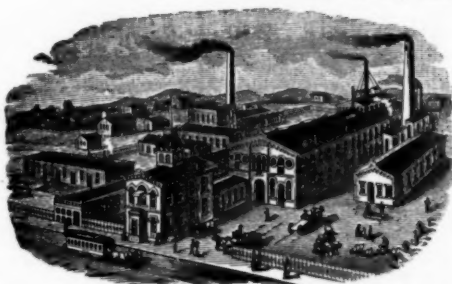
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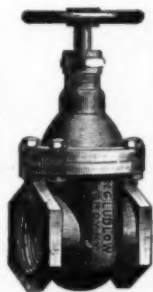
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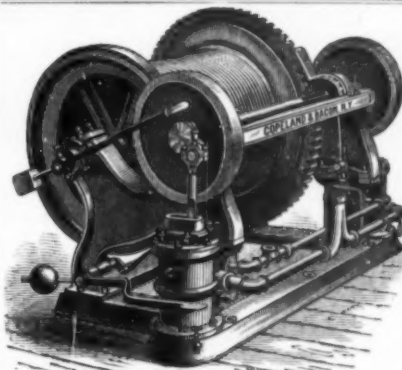
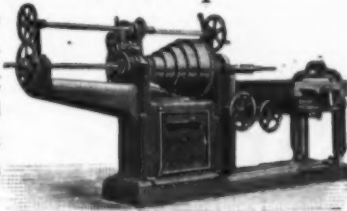
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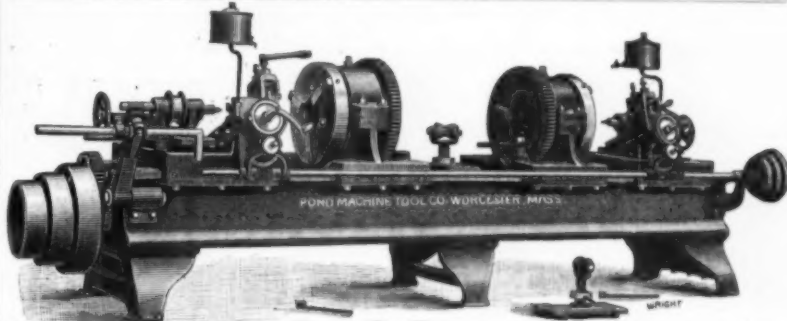
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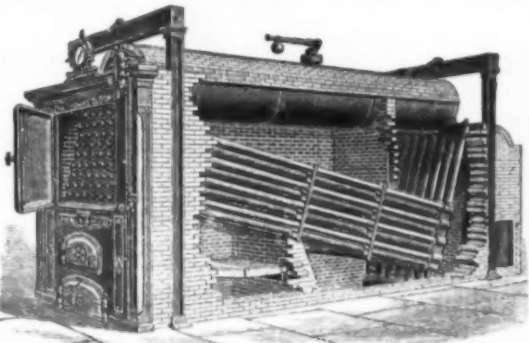
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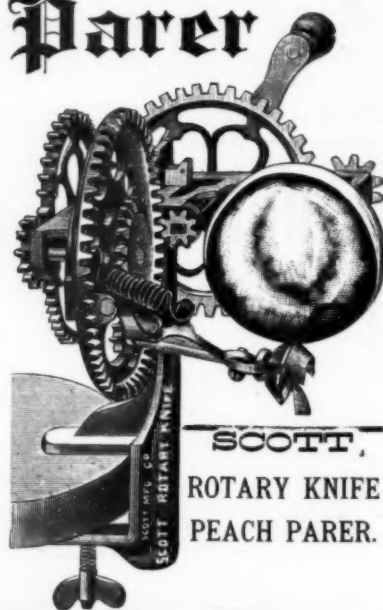
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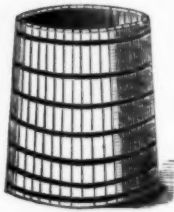
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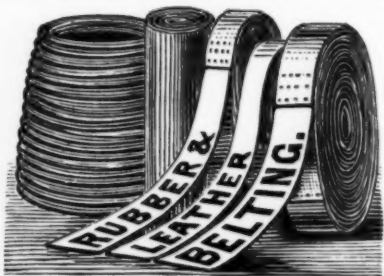
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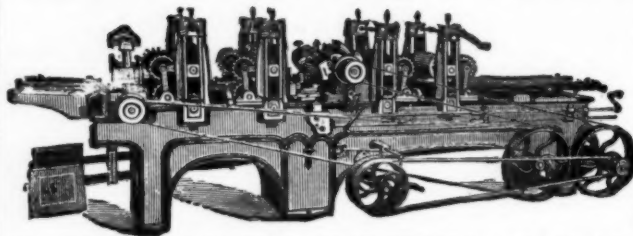
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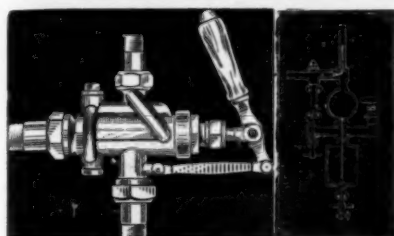
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Loose Pin, Acorns, Japanned.....	dis 70% to 10%
Loose Pin, Acorns, Jap'd, Plated.....	dis 70% to 10%
Tips.....	dis 70% to 10%
Wrought Iron.	
Fast Joint, Narrow.....	dis 60% to 10%
Fast Joint, L. Narrow.....	dis 60% to 10%
Fast Joint, Broad.....	dis 60% to 10%
Loose Joint, Broad.....	dis 60% to 10%
Table Butts, Back Flaps, &c.....	dis 60% to 10%
Inside Blind, Regular.....	dis 60% to 10%
Inside Blind, Light.....	dis 60% to 10%
Loose Pin, Wrt.....	dis 60% to 10%
Loose Pin, Light.....	dis 60% to 10%
Spring Hinges—	
Geer's Spring and Blank Butts.....	dis 25%
Hart Manufacturing Co.....	dis 60% to 10%
American Spring Hinge Co's.....	dis 25%
Gem Spring Hinges.....	dis 50% to 10%
Blind Butts, Shepard's, Nos. 50 and 60.....	dis 70%
Blind Butts, Shepard's, No. 050.....	dis 70% to 10%
Blind Butts, Shepard's No. 75.....	dis 70% to 10%
Blind Butts, Lull & Porter.....	dis 75%
Blind Butts, Huffer.....	dis 50%
Blind Butts, Clark's, Nos. 1, 3, 5.....	dis 75% to 10%
Standard Lull & Porter.....	dis 75% to 10%
BOW PINS.	
Humason, Beckley & Co's.....	dis 55% to 10%
Sargent & Co's.....	dis 75% to 10%
Hotchkiss.....	dis 25%
BUTCHER'S CLEARERS.	
Humason & Beckley Mfg. Co.....	dis 25%
Bradley's.....	dis 25%
Beatty's.....	dis 25% to 10%
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CAN OPENERS.	
American.....	gross \$7.50, dis 10%
New Idea.....	gross \$15.00, dis 10%
No. 4, French.....	gross \$2.25, dis 55%
No. 5, Iron Handle.....	gross \$7.50, dis 10%
Sardine Scissors.....	gross \$7.00, dis 55%
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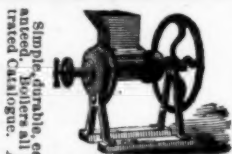
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for sale, capital wanted for industrial
enterprises, &c., &c.; while readers in
other sections who desire to engage
in manufactures at the South are also
invited to use these columns, without
cost, either in seeking information
regarding the advantages and special
claims of different localities, or for
asking about good openings for men
and money. This department is also
free for Southern manufacturers who
wish to advertise for mill managers,
superintendents, engineers, &c.
In corresponding with any of these
advertisers please mention the **Balti-
more Manufacturers' Record**.

BEING interested in quarrying fine Tennessee
marble, I would like to correspond with some one
having experience in sawing marble and with capital
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with quarry. Address P. O. Box 72, Rogersville,
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to join practical man in starting soap factory in this
growing city; one who can sell goods and manage
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to learn the machinist's trade. Address Trade, care
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Graduate of scientific school. Machine shop and
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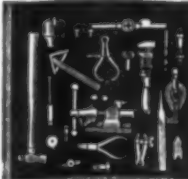
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The wear and tear of the Mill is much less than any other Quartz Mill doing the same amount of work, and the quality of the work done by it is greatly superior to work done in any other Quartz Mill now in use.

It crushes to a uniform fineness and makes no slimes, so that no sizing is required for concentration.

The Mill is equally well adapted to crushing and pulverizing of all classes of ores, either for amalgamation or concentration, and will pulverize and amalgamate from one-half to one ton per hour, according to character of ore and fineness of screens.

With ordinary care there is no loss of mercury by flouting, and consequent loss of gold, as in most other Mills where mercury is used in the Mill.

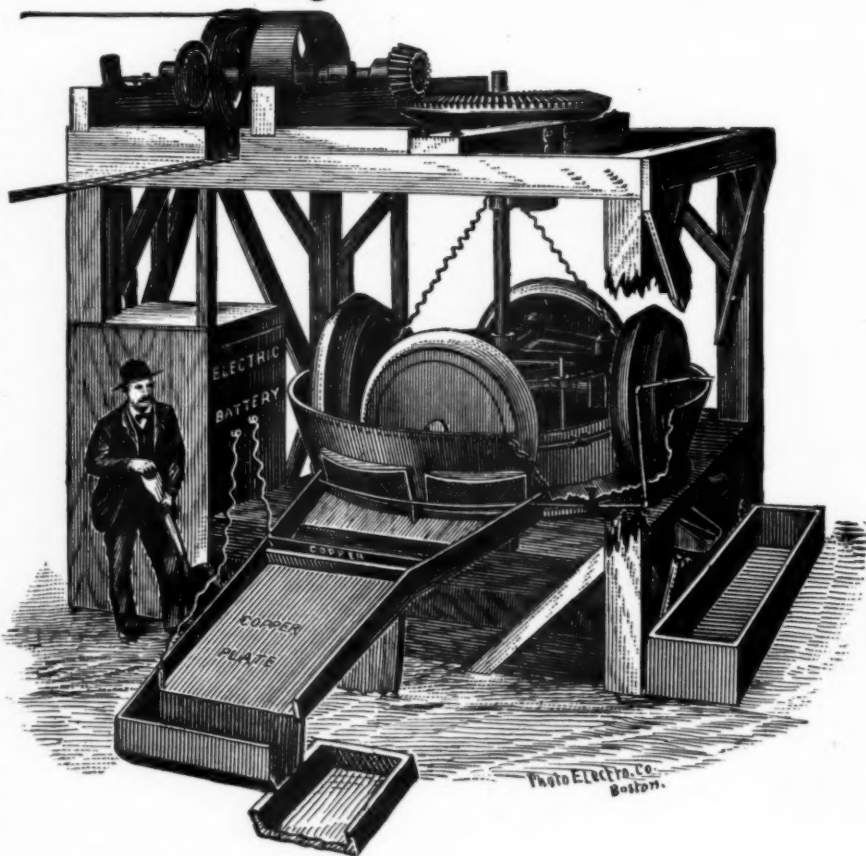
Amalgamation is carried on in the same operation with the crushing. The mercury is placed in the Mill in quantities varying from 10 to 40 pounds.

The application of electricity to the Mill for the purpose of cleaning and keeping the mercury alive has been to a very large extent superseded by the invention and introduction of the Mercury Trap in the Mill for the purpose of drawing off the mercury when charged with gold or on the slightest indication of flouting. By this ingenious device the mercury can be changed as often as desired without loss of time in either crushing or amalgamating. By opening this Trap the amalgam is discharged from the Mill in three minutes, and clean mercury introduced in its place.

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This Mill has been on exhibition at the foundry of Messrs. Bisbee & Endicott, at Chelsea, Mass., for the past 18 months, a good part of the time in active operation, and we have treated the most rebellious ores from many mining districts with most satisfactory results to the parties concerned.

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The chief ingredients causing sedimentary deposits and incrustation are organic matter, carbonate of lime, sulphate of lime, carbonate of magnesia, sulphate or sulphuret of iron, and in salt water common salt.

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No more "shutting down" of work to clean boilers—the machine does it all every day without interfering with the work, and by removing scale and preventing its formation, and heating the water to the boiling point *saves a large percentage of fuel*.

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This is to certify that I have made a careful examination of "Warner's Combined Purifier and Heater of Feed Water" in practical operation at the "Harris House" and "Post Building," in this city, and do not hesitate to pronounce it the *best* machine for the purpose ever invented. By its use the water goes into the boiler free from all impurities and heated to the boiling point under full boiler pressure, and as the result of the injection of pure water, the boiler is freed from scale and *kept clean*, while a large saving is made in fuel by the removal of the scale and heating the water to the boiling point *before* it enters the boiler. By the use of this machine the necessity of "shutting down" in order to blow out and clean the boiler is wholly obviated, as the impurities are all collected in the bottom of the machine, which can be blown out as many times a day as the engineer thinks proper without interfering with the workings of the boiler. I confidently commend this machine to all persons who own or use steam boilers, and am satisfied that its use will prolong the life of the boiler and make a handsome saving in the use of fuel.

(Signed) JOHN H. WILKERSON,

Inspector of Steam Boilers for District of Columbia, 220 7th Street, S. E.

"HARRIS HOUSE," COR. PENNSYLVANIA AVENUE AND E STREET, N. W.

WASHINGTON, D. C., June 23, 1885.

This is to certify that one of "Warner's Purifiers and Heaters of Feed Water" has been in use on one of the boilers of the Harris House, in this city, for three months, and has proved a perfect success. The boiler upon which the machine was placed was at the time covered with a heavy scale composed of animal and vegetable matter, lime, &c., which, by the use of this machine, has been entirely removed, the boiler being now as clean as when it came from the boiler-maker. This has been entirely accomplished, without the use of chemicals, by the injection of pure water through the "Purifier and Heater." This machine injects the water into the boiler heated to the boiling point under full boiler pressure, and by this means, together with the removal of the scale, results in a large saving of fuel. It is also invaluable in the purification of the water for laundry purposes. The machine is self-acting, and prevents the necessity of "shutting down" in order to blow out the boiler, as the impurities are all concentrated in the bottom of the machine, and can be blown out through the machine as often during the day as the engineer may deem advisable without interfering with the working of the boiler. I am convinced that its use will prolong the life of all boilers upon which it may be placed, save a large percentage of fuel, decrease the danger of explosion, purify the water for all purposes, and give general satisfaction. I confidently commend it to all hotels using steam and to owners of steam boilers generally as a much needed improvement that will do the work claimed for it thoroughly.

(Signed) JOHN H. HARRIS, Proprietor of Harris House, Washington, D. C.

This is to certify that one of "Warner's Purifiers and Heaters of Feed Water" was placed upon the boiler of the Post Building about 60 days ago as a test. At that time the boiler was covered with a heavy scale of animal and vegetable matter, lime, &c., which it was impossible to prevent. By the use of this Purifier and Heater, which injects the water into the boiler free from all impurities and heated to the boiling point, the scale has been removed and the consumption of coal reduced. The machine works itself and is invaluable as a purifier of water to all branches of business requiring pure water, such as hotels, laundries, &c., and a much needed adjunct to all steam boilers, prolonging their life, decreasing the danger of explosion and effecting a large reduction in the consumption of fuel. I confidently commend Warner's Purifier and Heater to all owners of steam boilers, being confident that their interests will be subserved by its use.

(Signed) J. FRANK MCGUIRE, Superintendent and Engineer Post Building.

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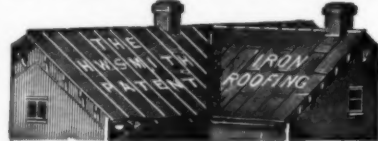
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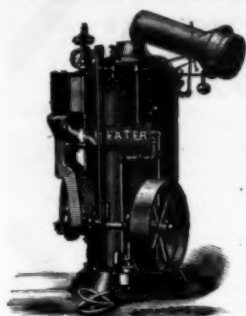
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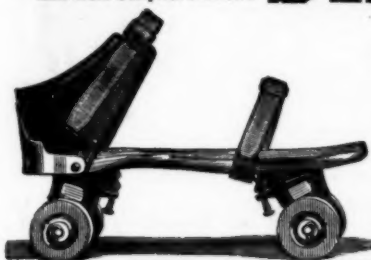
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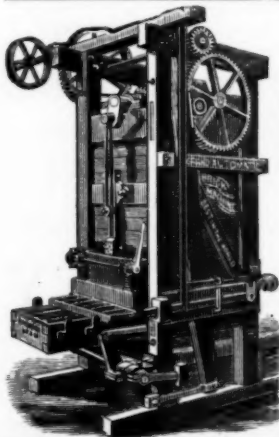
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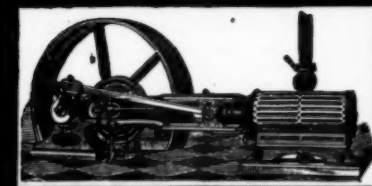
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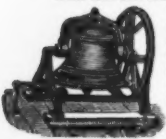
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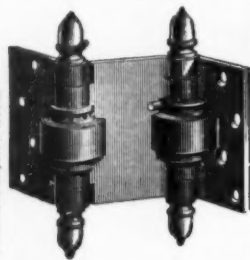
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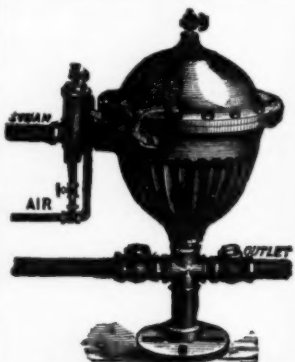
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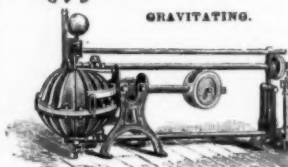
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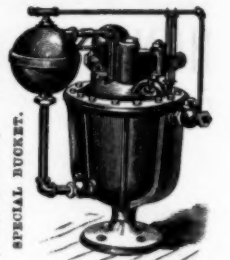
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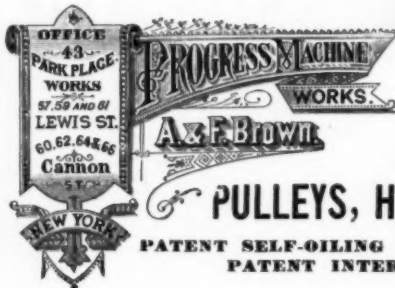
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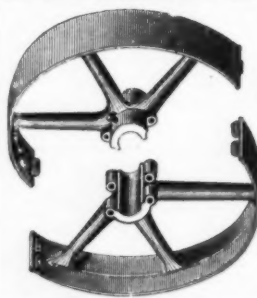
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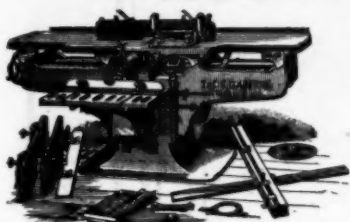
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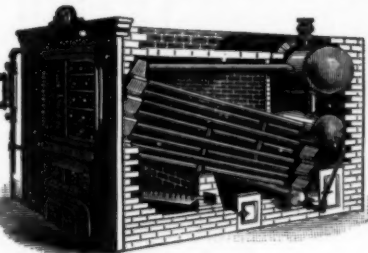
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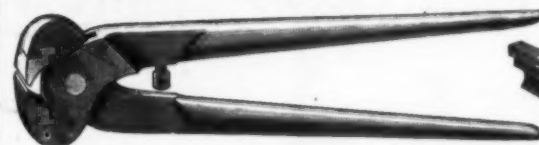
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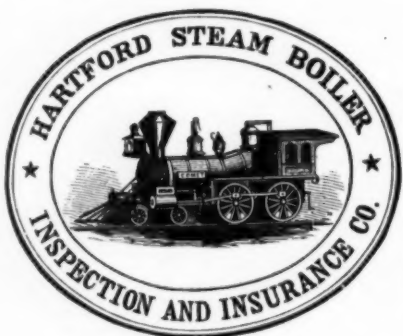
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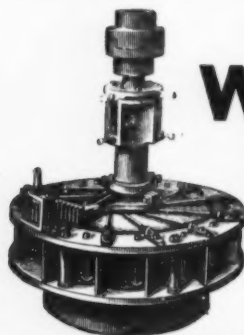
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to 1,000 have displaced other engines. On the
contrary, we know of but three parties, who,
having bought one Westinghouse Engine,
have failed to give us their subsequent
orders. We have learned of but six
second-hand engines being offered for
sale, all of which were either from fire
or failures. Nine engines (our earliest)
were thrown back on our hands
altogether. This is our record,
with about 1,500 en-
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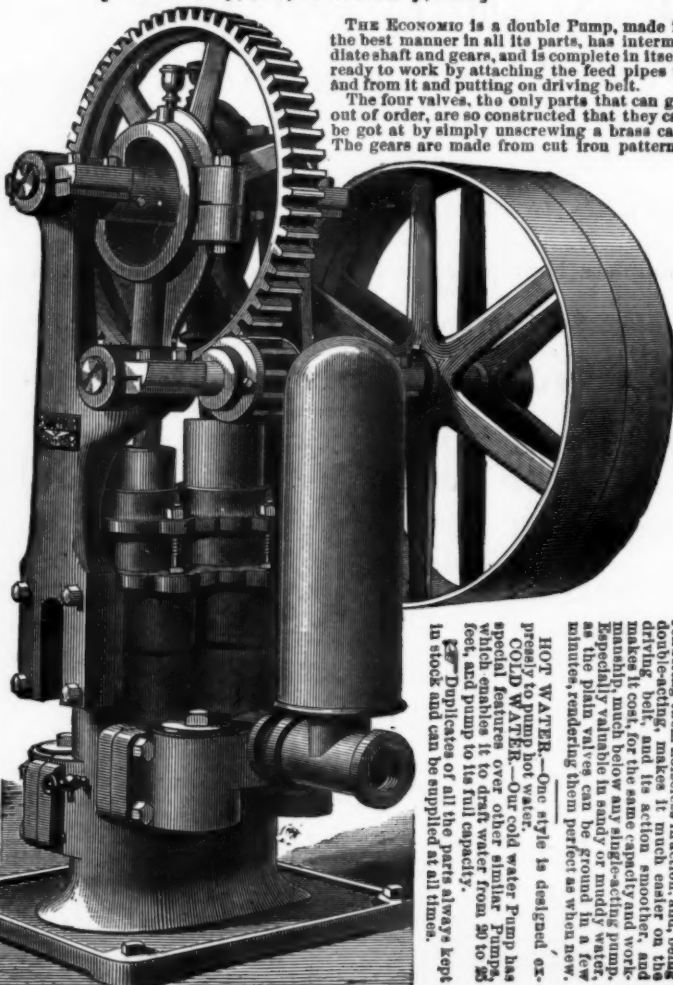
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THE ECONOMIC PATENT Boiler Feed Pump

[Patented May, 1879, and February, 1883.]

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Philadelphia office, 125 North 4th St., JAS. BERRYMAN, Manager.



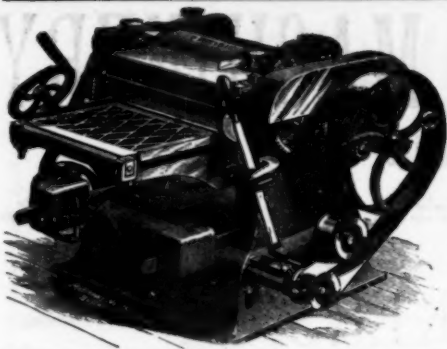
THE ECONOMIC is a double Pump, made in
the best manner in all its parts, has interme-
diate shaft and gears, and is complete in itself,
ready to work by attaching the feed pipes to
and from it and putting on driving belt.

The four valves, the only parts that can get
out of order, are so constructed that they can
be got at by simply unscrewing a brass cap.
The gears are made from cut iron patterns,

rendering them noiseless in action, and, being
double-acting, makes it much easier on the
driving belt, and its action smoother, and
makes it cost, for the same capacity and work-
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Especially valuable in sandy or muddy water,
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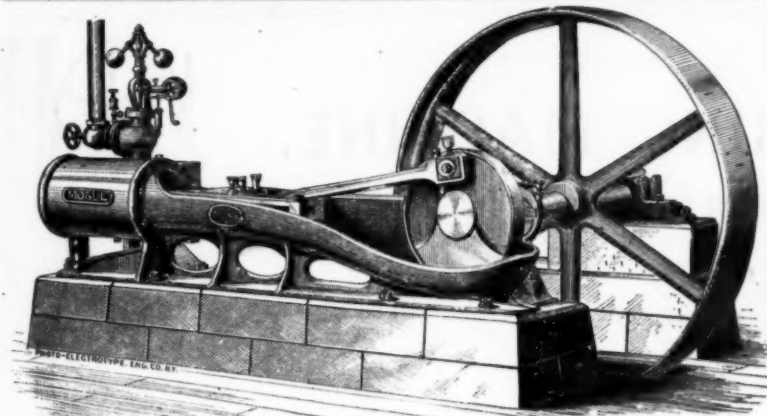
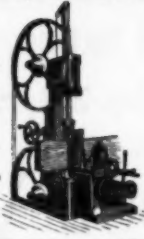
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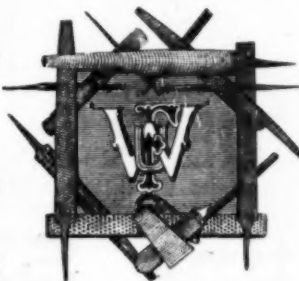
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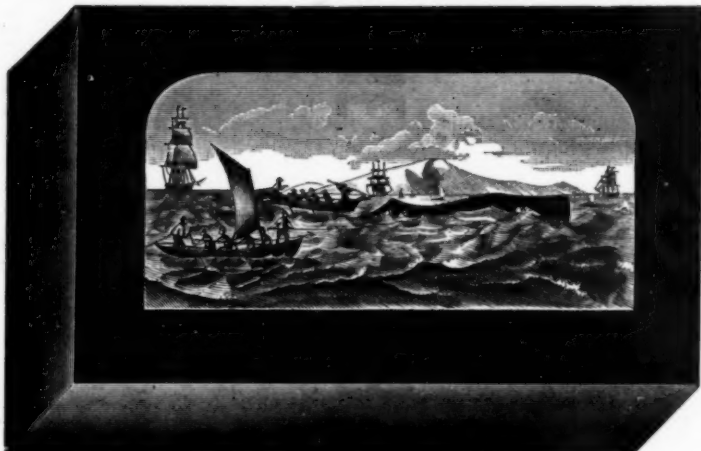
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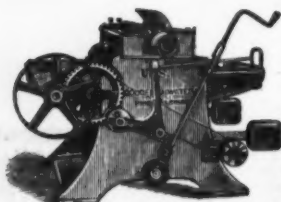
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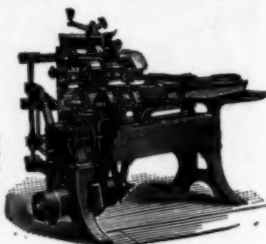
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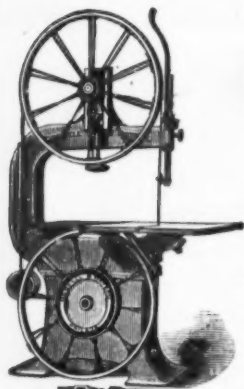


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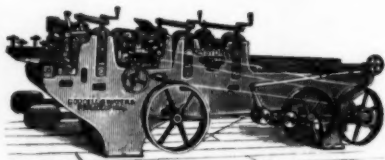
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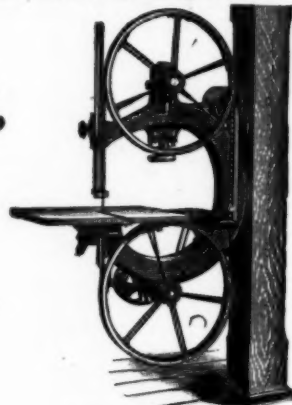
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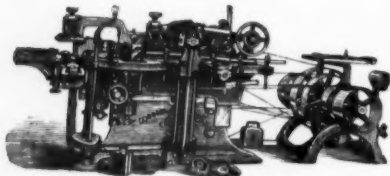


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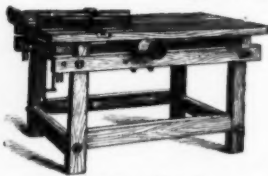
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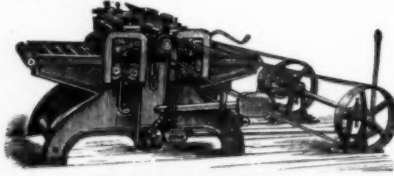
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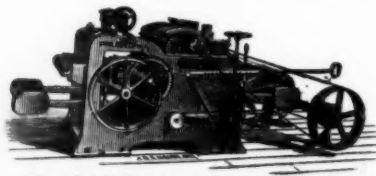
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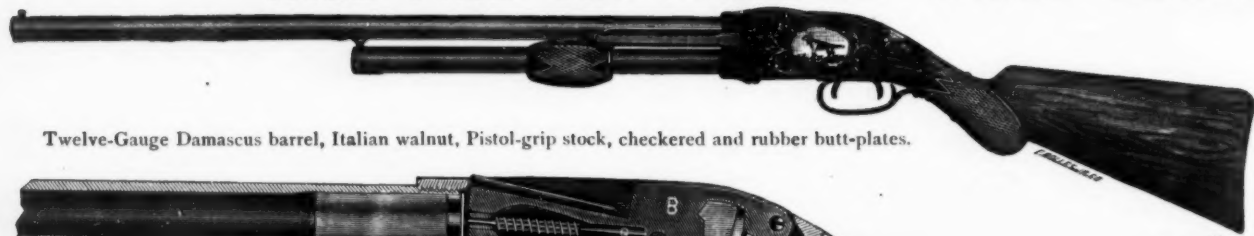
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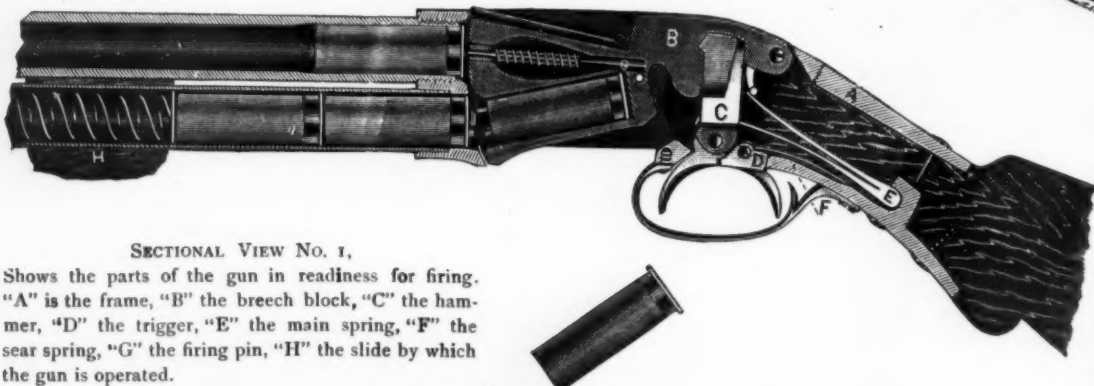
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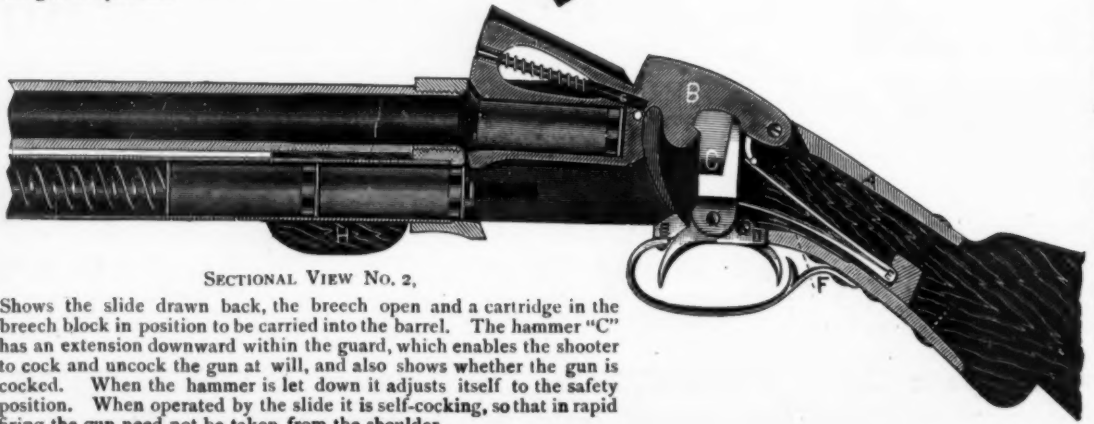


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SECTIONAL VIEW NO. 1.

Shows the parts of the gun in readiness for firing. "A" is the frame, "B" the breech block, "C" the hammer, "D" the trigger, "E" the main spring, "F" the sear spring, "G" the firing pin, "H" the slide by which the gun is operated.



SECTIONAL VIEW NO. 2.

Shows the slide drawn back, the breech open and a cartridge in the breech block in position to be carried into the barrel. The hammer "C" has an extension downward within the guard, which enables the shooter to cock and uncock the gun at will, and also shows whether the gun is cocked. When the hammer is let down it adjusts itself to the safety position. When operated by the slide it is self-cocking, so that in rapid firing the gun need not be taken from the shoulder.

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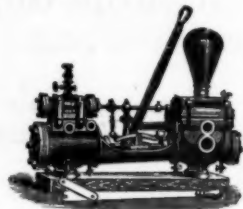
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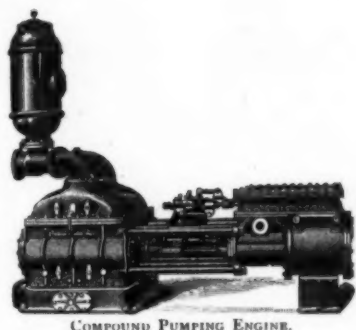


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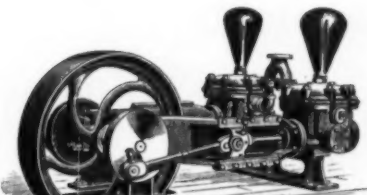


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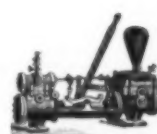


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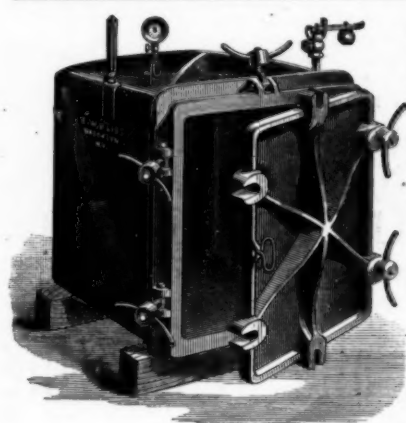


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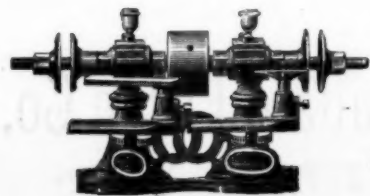
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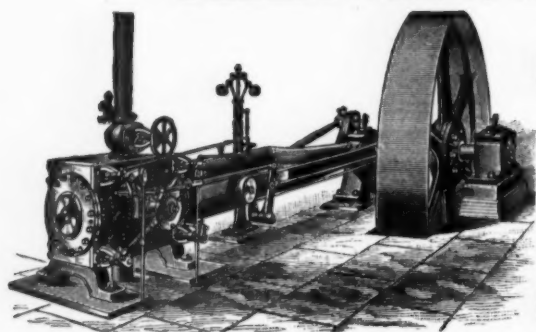
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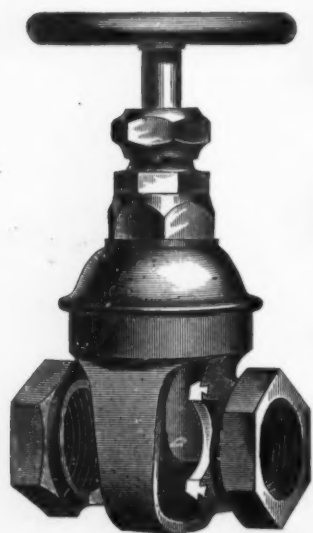
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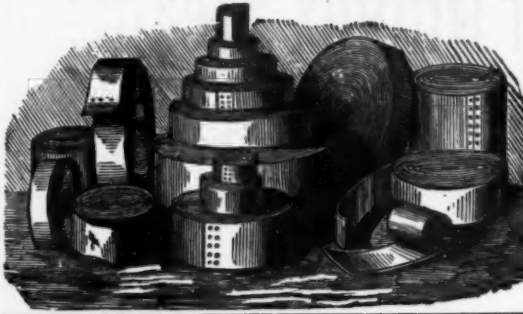
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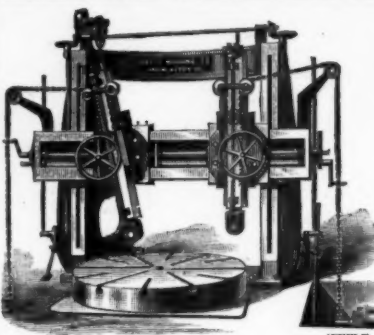
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